DOCUMENT RESUME

ED 213 637 SO 013 912

AUTHOR Mathews, Gary Steven
TITLE An Examination of Designing Instruction at Three Levels for a Mastery Approach to Social Studies Education: A Practical Guide for Administrators and Teachers.
PUB DATE Oct 80
NOTE 123p.; Degree of Specialist in Education, University of Southern Mississippi.

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Check Lists; Course Descriptions; *Curriculum Design; Flow Charts; Literature Reviews; *Mastery Learning; Models; Secondary Education; *Social Studies; Units of Study
IDENTIFIERS Blooms Taxonomy

ABSTRACT

The purpose of this study was to provide New Orleans public school administrators and teachers with the information and tools needed to design a systems-based mastery learning (ML) approach to secondary social studies teaching and learning. The following information and tools are provided in this report. There is an introduction to the basic philosophy, concepts, and terminology associated with ML and systems based instructional design (SBID). The study provides a review of related literature, both conceptual and field-related with respect to ML, social studies teaching, and SBID. John B. Carroll's Model of School Learning is viewed as the major theory behind mastery learning. Bloom's taxonomy of educational objectives as a basis for determining program, course, and unit goals for the social studies is reviewed. The study describes how a systems-based model can be used to design instruction, program and course syllabi, and an instructional unit. Flow charts and checklists on each of these processes are provided. Also included are an exemplary program syllabus, course syllabus, and instructional unit in social studies designed for group-based ML and developed with respect to SBID. (Author/RM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED213637

50

MAR 1

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

University of Southern Mississippi

AN EXAMINATION OF DESIGNING INSTRUCTION AT THREE LEVELS FOR A MASTERY APPROACH TO SOCIAL STUDIES EDUCATION: A PRACTICAL GUIDE FOR ADMINISTRATORS AND TEACHERS

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Gary S. Mathews
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

by

Gary Steven Mathews

A Field-Related Project
Submitted to Dr. William M. Hetrick
of the Graduate Faculty
in Completion of the Requirement
for EDA 794
and
in Partial Fulfillment of the Requirements
for the Degree of Specialist

October 1980

SP 013 912

ACKNOWLEDGMENTS

This field-related study could not have been completed except for the interest and cooperation provided its author by several important individuals.

Thanks go first of all to Dr. William M. Hetrick, the author's advisor, for approving the initiation of the project. His enthusiasm and expressed interest in my work has been a source of encouragement and determination.

Dr. James H. McPhail, Chairman of the Department of Educational Administration and Supervision, is owed a sincere expression of appreciation due to his understanding and insight with respect to the author's desire to complete this requirement for the degree of Specialist in Education. A needed learning experience has been the result.

Without the necessary background in a systems-based approach to designing instruction, the likelihood of the following pages would have been greatly reduced. Many, many thanks go to Dr. Glenn M. Hymel, Director of the New Orleans-based Loyola University Center for Educational Improvement, for his friendship and for introducing the author to mastery learning and systems-based instructional design. He has spent numerous hours with me teaching and discussing the concepts contained herein.

Finally, an extra special "thank you" is reserved for the author's wife, Mary Kay, who with our two children, Kelly and Jason, literally left the author alone for days at a time so that he could work on and complete this special interest.

TABLE OF CONTENTS

		PAGE
ACKNOWLEDGMENTS		ii
LIST OF FIGURES		vii
ABSTRACT		viii
CHAPTER		
1	Introduction	1
	Purpose of the Study	2
	Need for the Study	3
	Statement of the Problem	4
	Definition of Essential Terms	5
2	Review of Related Literature	9
	Carroll's Model of School Learning: The Theory Undergirding Mastery Learning	9
	Group-Based LFM versus Continuous Progress PSI	12
	Mastery Learning (LFM): Its Operating Procedures	13
	Preconditions	13
	Operating Procedures	14
	Mastery Learning: Some Field Research	15
	Cognitive Outcomes	15
	Affective Outcomes	18
	Parental Response to Mastery Learning	19
	Student Response to Mastery Learning	19

CHAPTER		PAGE
2		
	Mastery Learning and the Social Studies	20
	Social Studies Defined and Distinguished	20
	The Textbook Curriculum	20
	Mastery Learning Research in Social Studies	21
	Systems-Based Instructional Design	22
	Design in Education	22
	Teaching As an Art	23
3	Materials and Procedures	24
	Materials	24
	Procedures	25
	Overview of Designing Instruction: A Description of Fig. 1	27
	Designing A Program Syllabus: A Description of Fig. 2	30
	Designing A Course Syllabus: A Description of Fig. 3	34
	Designing an Instructional Unit: A Description of Fig. 4	38
	Bloom's Taxonomy of Educational Objectives: A Basis for Determining Program, Course, and Unit Goals/Objectives	41
	Why Specify Program, Course, and/or Unit Goals/Objectives?	42
	Basis for Selecting Goals/Objectives	43
	The Taxonomy	44
4	Data Analysis	51
	Action Research	51
	LFM (ML) and SBID: A Practical Analysis	51

CHAPTER		PAGE
5	Summary, Conclusions, Recommendations, and Implications	53
	Summary and Conclusions	53
	Recommendations	54
	Implications for Further Study	56
REFERENCES		58
APPENDIX		
A	Checklist for Designing A Program Syllabus; Exemplary Program Syllabus; Checklist for Designing A Course Syllabus; Exemplary Course Syllabus; Checklist for Designing An Instructional Unit; Exemplary Instructional Unit	62
	CHECKLIST FOR DESIGNING A PROGRAM SYLLABUS	63
	EXEMPLARY PROGRAM SYLLABUS	64
	CHECKLIST FOR DESIGNING A COURSE SYLLABUS	70
	EXEMPLARY COURSE SYLLABUS	71
	CHECKLIST FOR DESIGNING AN INSTRUCTIONAL UNIT	81
	EXEMPLARY INSTRUCTIONAL UNIT	83
B	John B. Carroll's Model of School Learning	103
VITA		106

LIST OF FIGURES

Figure		Page
1.	Systems-Based Model For Designing Instruction	26
2.	Systems-Based Model For Designing A Program Syllabus	29
3.	Systems-Based Model For Designing A Course Syllabus	33
4.	Systems-Based Model For Designing An Instructional Unit	37

ABSTRACT

Background and Justification for the Study/Field Project

The New Orleans Public Schools during the 1978-1979 school year initiated a new curriculum program known as the Secondary Curriculum Improvement Program (SCIP). Benjamin Bloom's philosophy of mastery learning was adopted by the Board of Education to be the vehicle by which New Orleans secondary school students in grades 7-12 would master those academic skills deemed by the community to be crucial and necessary for high school graduation.

In response to SCIP, the "basic" areas of English, reading, and mathematics were to be designed and taught via the mastery learning philosophy and techniques. The application of systems-based instructional design and mastery learning to the area of social studies education was left virtually unattended to, perhaps due to a long-held notion on the part of many educators that the social studies are not conducive to a highly structured approach such as mastery learning. (Hymel, 1977, views systems-based instructional design as the mechanism for implementing mastery learning in the classroom.) However, mastery learning can be utilized effectively in social studies classes not only in New Orleans, but in other school districts as well. (For a comprehensive review of mastery learning research, see Block & Burns, 1976.)

Problem

The problem addressed in this field-related study is, succinctly put, as follows: How do administrators and social studies teachers (who are interested) systematically design a mastery learning approach to teaching, and what are the due considerations in adopting such an approach? As such, this action project was an attempt to solve a problem with direct application to the classroom. Borg and Gall (1979) point out that, "The principal advantage of action research is that it provides the teacher or administrator in the field with objective, systematic techniques of problem solving that are far superior to an appeal to authority or reliance on personal experience, which so often guides decisions in education" (p. 38).

Resolution of the Problem

With respect to the problem stated above, the purpose of this study was to provide school administrators and teachers in the field with the information and tools needed to design a systems-based mastery learning approach to social studies teaching/learning.

Included in the study were the following:

1. An introduction to the basic philosophy, concepts, and terminology associated with mastery learning (ML) and systems-based instructional design (SBID);

2. A review of related literature, both conceptual and field-related, with respect to mastery learning, social studies teaching, and systems-based instructional design; John B. Carroll's

Model of School Learning was viewed as the theory undergirding mastery learning;

3. A review of Bloom's taxonomy of educational objectives as a basis for determining program, course, and unit goals/objectives for the social studies;

4. Necessary flow charts and checklists with respect to the following: (a) overview of a systems-based model for designing instruction, (b) systems-based model for designing a program syllabus, (c) systems-based model for designing a course syllabus, (d) systems-based model for designing an instructional unit (see Figures 1, 2, 3 & 4), (e) checklist for designing a program syllabus, (f) checklist for designing a course syllabus, and (g) checklist for designing an instructional unit (see checklists in Appendix A); and

5. Exemplary program syllabus, course syllabus, and instructional unit in the social studies designed for group-based mastery teaching and developed with respect to systems-based instructional design (see Appendix A).

By making reference to the five items above, an administrator and/or teacher should be able to discern both theoretical and practical considerations inherent in the adoption of a systems-based approach to mastery learning instruction in the social studies. Furthermore, those interested in accountability-in-education might possibly view the models for designing instruction (and corresponding checklists) as potentially meaningful and effective guides with respect to evaluating the design of instruction by teachers in various areas.

Limitations

This study was limited to particular application for those administrators and teachers concerned with mastery learning and systems-based instructional design in the area of social studies education. However, though intended for the social studies segment of the curriculum, the materials and procedures cited in this study (chap. 3) may be applied to designing instruction in numerous curricular areas as noted by Hymel (1977). Indeed, Block and Burns (1976) note the existence of systems-based mastery strategies in a variety of areas and grade levels ranging from elementary school language arts to college physics.

Group-based rather than continuous progress mastery learning was the basis for the materials developed and placed in Appendix A.

Untested Hypothesis

Rice (1976) points out that there has been little evidence of mastery learning strategies in many social studies classes. As noted, many educators have not been favorably disposed to mastery learning in the social studies due to a certain bias. However, there may be an untested hypothesis at work explaining, if only in part, the absence of mastery strategies in social studies classrooms: that is, few social studies teachers are trained in and/or know about procedures relating to systems-based instructional design at any of its three levels, i.e., program syllabus, course syllabus, and instructional unit.

No statistical techniques were employed in the study to accept or reject the writer's hypothesis due to time limitations and intent of the project.

Recommendations

The following recommendations were made to administrators and teachers:

1. Before engaging in a strategy to systematically design instruction in social studies (or any subject matter area), agree upon a philosophical position. It is unlikely that teachers who view learning from a strict humanistic standpoint will readily accept, much less ever accept, a more behavioral approach to teaching and learning (see below). Commenting on the efforts of New Orleans school officials to implement a mastery learning program, ex-Superintendent Geisert (1979) points out that, "Another problem is getting teachers and administrators to alter their educational philosophy to conform with that of SCIP (the mastery learning program)" (p. 134).

a. Humanism. Dick and Carey (1978) note that, in essence, the humanistically oriented teachers believe that there is no best way to manage a classroom or to organize a learning exercise. They believe there exists no single formula for effective teaching, but rather a number of formulas.

b. Behaviorism. Behaviorally oriented teachers tend to view the instructor as the one responsible for instruction in cultural heritage, social responsibilities, and specific subject matter. They believe that these matters can not be left to the individual interests of students alone. This type of teacher emphasizes a carefully prepared lesson plan (instructional unit), logically organized material, and specific educational objectives. In essence, these individuals prefer a

systematic approach to teaching which utilizes research knowledge on the conditions of learning (or models of school learning such as put forth by Carroll, 1963) required for students to achieve clearly defined outcomes.

Administrators and teachers interested in mastery learning would do well to be obliged to a behavior-oriented approach to teaching/learning. Success is dubious otherwise.

2. Study the literature with respect to mastery learning, social studies teaching, systems-based instructional design, and Carroll's model of school learning.

3. Determine the scope of the social studies program, i.e., designed to prepare students for the world of work, creative and artistic experiences, citizenship, leisure time, and/or future academic pursuits in college. Determine what courses will be needed to carry out the program. Formulate specific units of instruction for each of the program's courses. Proceed with all of the foregoing coinciding with a careful study of Bloom's Taxonomy. Goals/Objectives required.

4. Study carefully and follow the procedures suggested by the various flowcharts and checklists contained herein when developing a program syllabus, course syllabi, and instructional units.

5. View exemplary materials, contained herein or elsewhere, that have been designed via a systems approach for social studies education.

6. Consult outside resource personnel or experts in mastery learning and systems-based instructional design.

7. Be patient.

CHAPTER 1

Introduction

Today's school administrator and classroom teacher are faced with an instructional philosophy that is and has been creating controversy among members of the general public and within the educational community itself. Mastery learning (see Bloom, 1968) as an educational philosophy asserts that under appropriate instructional conditions virtually all students can learn well, that is, can "master," most of what they are taught in school. In light of increasing demands for accountability, educators would do well to consider an educational/instructional philosophy that purports to increase students' chances for both short-term and long-term social survival (Block & Burns, 1976).

Hymel (1977) notes that the mechanism for accomodating mastery learning is known as systems-based instructional design. There exists a number of models for designing instruction which bear the label "systems approach" (Dick & Carey, 1978). However, the model discussed herewith shares many of the key components found in others, and provides a useful first step in designing instruction at the program syllabus, course syllabus, and instructional unit levels (see CHAPTER 3 & Appendix A).

Although teachers of social studies have known about mastery learning for some time, there seems to be little evidence of mastery learning strategies in many social studies classes (Rice, 1976). This may be due, in part, to the commonly held view that social studies materials do not lend themselves very well to a highly structured, hierarchially sequenced arrangement such as that suggested by mastery learning. However, there may be an untested hypothesis at work: that is, few social studies teachers are trained in and/or know about procedures relating to systems-based instructional design at any of its three levels.

With the effectiveness of mastery learning well documented in the research literature (Block & Burns, 1976; Bloom, 1976), administrators and teachers need to take a closer look at the process through which mastery learning can become a classroom reality. Systems-based instructional design is that process.

Purpose of the Study

The purpose of this study is to provide school administrators and teachers in the field with the following information and tools needed to design a systems-based mastery approach to social studies teaching/learning:

1. An introduction to the basic philosophy, concepts, and terminology associated with mastery learning (ML) and systems-based instructional design (SBID);

2. A review of related literature, both conceptual and field-related, with respect to mastery learning, social studies teaching, and systems-based instructional design; John B. Carroll's Model of School Learning is viewed as the theory undergirding mastery learning;

3. A review of Bloom's taxonomy of educational objectives as a basis for determining program, course, and unit goals/objectives for the social studies;

4. Necessary flow charts and checklists with respect to the following: (a) overview of a systems-based model for designing instruction, (b) systems-based model for designing a program syllabus, (c) systems-based model for designing a course syllabus, (d) systems-based model for designing an instructional unit (see Figures 1, 2, 3 & 4), (e) checklist for designing a program syllabus, (f) checklist for designing a course syllabus, and (g) checklist for designing an instructional unit (see checklists in Appendix A); and

5. Exemplary program syllabus, course syllabus, and instructional unit in the social studies designed for group-based mastery teaching and developed with respect to systems-based instructional design (see Appendix A).

Need for the Study

New Orleans Public Schools during the 1978-1979 school year initiated a new curriculum program known as the Secondary Curriculum Improvement Program (SCIP). SCIP was designed to afford

junior and senior high students with "at least those basic academic skills which the New Orleans community will agree that high-school students should master before receiving a diploma" (New Orleans Public Schools, 1978). Benjamin Bloom's philosophy of mastery learning was adopted by the Board of Education to be the vehicle for achieving the goal.

In response to SCIP, the "basic" academic areas of English, reading, and mathematics were to be designed and taught via the mastery learning philosophy and techniques. Inservice workshops provided administrators and teachers with information on mastery learning and, in some instances, systems-based instructional design. Group-based instruction, as opposed to continuous progress, was to be utilized (see p. 12 for distinction).

The area of social studies development and curriculum change was left virtually unaffected. However, mastery learning and systems-based instructional design can be utilized effectively in social studies classes not only in New Orleans, but in other school districts as well; hence, the need for this study.

Statement of the Problem

Succinctly put, the problem is as follows: How do administrators and social studies teachers (who are interested) systematically design a mastery approach to teaching, and what are the due considerations in adopting such an approach?

Definition of Essential Terms

The following definitions are listed for the purpose of ensuring the proper interpretation of the terminology cited in this study:

1. Advance organizer refers to an aid, usually an outline, made available to students by the teacher to help them relate specific information to their general knowledge; it is used when addressing various topics within an instructional unit to increase the familiarity and learnability of new material (Ausubel, 1963, p. 82).

2. Carroll's Model of School Learning refers to that theoretical model purporting to give explanation to learning in schools; it is viewed as a supporting basis for mastery learning (see Appendix B).

3. Course syllabus refers to a written document depicting the pertinent identifying information regarding a particular course (or class) of study; it includes a narrative description of the course, rationale for its existence, goals or general objectives, prerequisites, outline of various units, instructional methods, major requirements, resources, schedule, evaluation plan for students, and a course evaluation form for the purpose of feedback to the teacher.

4. Criterion-referenced refers to evaluation or judgment against a fixed standard of performance (Pratt, 1980); the student is not evaluated in relation to his/her peers (Torshen, 1977, pp. 186-187).

5. Formative test refers to an ungraded instrument used to diagnose the adequacy of a student's learning; it is usually administered on an intermittent basis throughout an instructional unit (Block, 1971, pp. 79-87).

6. Instructional design refers to a process of specifying and producing a classroom environment that causes pupils to react in a certain way (Hymel, 1977, p. 42).

7. Instructional unit refers to a written document depicting the unit topic addressed, a narrative description of the subject matter, rationale for its inclusion as a defined segment of the course, performance objectives, prerequisites, advance organizer, methods of instruction, learning activities, resources, formative evaluation instrument (test), learning correctives (and reporting instrument), summative test, and unit evaluation form for the purpose of feedback to the teacher.

8. Learning correctives refer to specific supplementary instructional procedures whereby each pupil can correct his/her particular unit learning difficulties; they translate the diagnostic information provided by formative evaluation into meaningful exercises of student review and/or remediation (Block, 1971, pp. 71-73).

9. Mastery learning refers to both a set of philosophical assumptions regarding the capability of students to learn and a set of curricular/instructional/evaluative procedures

addressed by teachers so as to maximize the quality of instruction delivered to students. In the former, it is assumed that under appropriate instructional conditions virtually all students can learn well, that is, can "master," most of what they are taught in school (Bloom, 1968). In the latter, the mastery strategy calls for the use of the following: relatively small, manageable units of instruction that are sequentially arranged; the specification of performance objectives and expected levels of proficiency; criterion-referenced formative and summative tests; and learning correctives (Block & Anderson, 1975).

10. Performance objective refers to a statement of what the teacher expects a student to do subsequent to instruction--specific behaviors and/or skills--to be exhibited by the pupil (Hymel, 1977, p. 146).

11. Program syllabus refers to a written document depicting the program name, narrative of subject-matter content, rationale for program existence, goals and/or sub-goals, prerequisites, a listing of courses, instructional methods, major requirements and corresponding deadlines, resources, program calendar, and evaluation criteria to be used in the program regarding students and teachers.

12. Prerequisites refer to that previous knowledge and/or skills possessed by the student upon entry into an instructional unit (program or course). The appropriate starting point in the presentation of a new topic would not be known without determining the student's prior experience and ability (Hymel, 1977, p. 146).

13. Proficiency refers to that level of academic achievement at which mastery is said to take place (Hymel, 1977, p. 27).

14. Summative test refers to a graded instrument used to finalize a student's grade on a unit of instruction or at the end of a course; it is not used to diagnose learning deficiencies (Block, 1971, pp. 78-79).

15. System refers to a deliberately designed synthetic organism, comprised of interrelated and interacting components which are employed to function in an integrated fashion to attain predetermined purposes (Hymel, 1977, p. 42).

16. Systems-based instructional design refers to a process of specifying and producing a classroom environment that causes pupils to react in a certain way via the system concept of constructing instructional materials (see definitions of instructional design and system on p. 6 and above respectively).

CHAPTER 2

Review of Related Literature

Carroll's Model of School Learning: The Theory Undergirding Mastery Learning

John B. Carroll's model of school learning is a paradigm purporting the degree of learning that occurs in a school setting to be a function of time spent (TS) on a learning task divided by the time needed (TN) for its mastery. Five variables make up the model: opportunity (O), perseverance (P), aptitude (APT), ability to understand instruction (AUI), and quality of instruction (QI). Opportunity and perseverance determine time spent while aptitude, ability to understand instruction, and quality of instruction determine time needed. Carroll's model can be depicted as follows:

$$\text{Degree of learning} = f\left(\frac{TS}{TN}\right) \text{and,}$$

Carroll (1963) noted that in the school situation the time spent and the time needed were influenced by the characteristics of the learner's instruction, not just the traits of the learner himself/herself. Specifically, time spent was determined by the pupil's perseverance, opportunity to learn, or the time needed

to learn (see Appendix B for definitions of P & O). Block and Burns (1976) point out:

> It was Carroll's belief that if both the student's opportunity to learn and his time needed to learn were greater than his perseverance, then his perseverance would determine the time spent in learning. Likewise, if both his perseverance and his time needed were greater than his opportunity, then his opportunity would determine the time spent. And if both his perseverance and his opportunity were greater than his time needed, then the time needed would determine the time spent: The student would spend no more time in learning than he needed to spend. (p. 5)

Time needed to master the subject matter was determined by the student's aptitude, ability to understand instruction, and the quality of instruction exposed to (see Appendix B for definitions of APT, AUI, & QI). Quality of instruction and ability to understand instruction working interactively, determines the additional time a student would need to spend under the situations less than ideal. Aptitude, on the other hand, determines the time required for a student to learn the subject matter under ideal conditions of instruction. Block and Burns indicate:

> If the quality of instruction were high, then the student would readily understand it and would need little additional

> learning time over and above the time demanded by his aptitude. But if the quality of instruction were low, then the student would have difficulty understanding it and would need much additional learning time. (p. 6)

Block (1973) suggests that Bloom transformed Carroll's conceptual model into a working model of mastery learning by the following logic:

> If aptitude were predictive of the rate (time required), but not necessarily the level, at which a student could learn, it should be possible to fix the degree of learning expected of each student at some mastery performance level. Then by attending to the time allowed and the quality of instruction (and its design)--the variables under teacher control in Carroll's model--the teacher should be able to ensure that each student attains this level. (p. 30)

Significantly, the above reference to "attending to the time allowed and the quality of instruction (and its design) . . .," constitutes the major focus of systems-based instructional design with regard to the teacher's contribution to student learning. A high quality of instruction, though not guaranteed in practice, is the probable result of systems-based learning materials formulated and implemented by the classroom teacher.

Block (1973) elaborating on Bloom's 1968 position adds:

> Bloom argued that if students were normally distributed

> with respect to aptitude for some subject and were provided with uniform instruction as to time allowed and quality of instruction, then few of them would attain mastery . . . But if each student received differential instruction as to time allowed and quality of instruction, then a majority of students, perhaps 95 percent, could be expected to attain mastery . . . (pp. 30-31)

Group-Based LFM versus Continuous Progress PSI

There are essentially two ways to achieve a mastery approach to instruction (Burns, 1979). They are: Keller's Personalized System of Instruction (PSI) and Bloom's Learning for Mastery (LFM or ML).

PSI is an individually-based, pupil-paced approach to mastery. Students typically move at their own individual paces and independently of their classmates. Programmed learning exemplifies Keller's position with respect to teaching/learning. The student continues on to new learning materials only after demonstrating mastery of that which preceded it. (For a complete description of PSI, see Keller, 1968.)

LFM or ML is designed for use in group-based instructional situations, such as are quite common across the nation, where the calendar time (i.e., semesters, trimesters, quinmesters, etc.) allowed for learning is relatively fixed. Bloom's mastery learning strategy is aimed at minimizing the time a student needs to learn within the fixed time parameters. Operational

considerations and preconditions are discussed below.

Mastery Learning (LFM): Its Operating Procedures

Preconditions

Abrams (1979) states, "Put in simplest terms, mastery learning involves the identification of topics within a curriculum area and the development of objectives that test learners' mastery of each of those topics" (p. 139). Though it may not be quite as simple as Abrams suggests, a precondition for mastery teaching does involve the specification of performance objectives, the level of proficiency to which they are to be mastered, and the construction of criterion-referenced formative and summative tests (Hymel, 1977, p. 27).

Block (1973) cites still another crucial precondition for mastery learning instruction. Unless the teacher (and administrator) begins with the assumption that most of our students can learn well and that educators promoting such excellent learning are not "oddballs", mastery learning is not possible! The teacher and administrator must reject the notion that only a few students can make A's in a given course. Furthermore, teachers and administrators must accept the concept of criterion-referenced evaluation. Otherwise, Torshen's characterization of American education as "average-based" will continue to be applicable (1977, chap. 2).

Other preconditions for a LFM strategy include the organisation of a course into a sequence of small instructional units, and the development of feedback/correction procedures including a set of learning correctives (Hymel, 1977, p. 27).

Operating Procedures

After attending to the necessary preconditions for mastery learning, the teacher is then ready to "teach for mastery." Hyman and Cohen (1979) describe mastery teaching techniques via the following:

1. Define instructional objectives behaviorally so that learner and teacher know exactly where they are, where they are going, and where they have been.

2. Go directly to the defined behavior--that is, direct teaching of the behavior or "attitude" sought rather than "building to it" or around it.

3. Provide immediate feedback to all learner responses. The more immediate the feedback, the more efficient the learning.

4. Rig the level of instruction (within reason) so that feedback is maximally positive. Success breeds success. . .

5. Modularize (develop instructional units) by cutting down the bites to small, self-contained nibbles. Closure is the most potent of all positive feedback techniques. The smaller the bite, the more immediate the closure.

6. Control the stimulus so we know exactly what the learner is responding to. That is a major problem in commercially published materials.

7. Reinforce by positive feedback the learner's critical response. The critical response is the one that responds to the appropriate stimulus defined precisely by the instructional objective.

Hyman and Cohen point out that "For 15 years, every piece of LFM instructional material we have developed, every classroom strategy, and every curriculum decision has been controlled by these (above) seven techniques" (p. 106).

Mastery Learning: Some Field Research

Cognitive Outcomes

Perhaps the most powerful illustration of the effectiveness of mastery learning with respect to academic achievement is the work that has taken place in Korea (see Kim, 1971 & Lee et al., 1971, in Torshen, 1977). Using group-based mastery procedures for teaching students in elementary and secondary schools, Kim found that 75% of the students who learned with mastery procedures attained the acceptable performance level of at least 80%; only 40% of the nonmastery students attained the required performance level. The study involved 272 seventh graders.

Based on the above results, Kim expanded his mastery program to consist of 5,800 seventh grade students from nine

middle schools in Seoul. They were taught English and mathematics for eight weeks. As in the pilot study above, the criterion of 80% correct on a objective-referenced posttest was used to define mastery. In English, 72% of the LFM students attained criterion, whereas 28% of the nonmastery students performed at the minimum pass level.

Kim's next project involved 25,887 seventh grade students from rural and urban areas over an entire school year. LFM and non-mastery groups were set up in the areas of English, mathematics, physics, and biology. An 80% criterion factor was again employed. In English, 50% of the mastery students performed at criterion, while 44% of the nonmastery students performed at criterion. In mathematics 48% of the LFM students performed at criterion, and 26% of the nonmastery students performed at criterion. In physics, 30% of the mastery students performed at criterion, and 8% of the nonmastery students performed at criterion. In biology, 22% of the mastery students performed at criterion, and 3% of the nonmastery pupils performed at criterion (Kim, 1971, 1974).

Lee, in 1971, replicating Kim's LFM procedures, involved 12,000 fifth and sixth grade students enrolled in arithmetic and science classes. Mastery learning was employed in 99 classrooms with 7,409 students; an additional 5,095 students from 80 classrooms who learned under normal, nonmastery conditions served as comparisons in the study. The results are impressive.

Fifth grade arithmetic pupils learning for mastery reached the criterion at a 42% ratio; only 12% of the nonmastery group reached the criterion. Forty-five percent (45%) of the sixth grade arithmetic pupils learning for mastery performed at criterion level compared to only 18% of the nonmastery students. In fifth grade science, 39% of the mastery-taught students reached the criterion compared to only 7% of the nonmastery students. And, in sixth grade science, 46% of the mastery students reached the criterion compared with only 12% of the nonmastery students.

Hyman and Cohen (1979) point out that after gathering data in more than 3,000 schools on thousands of students, "LFM is consistently more effective than traditional curriculums" (p. 105). Block and Burns (1976) give a comprehensive "state of the art" report which supports the statement of Hyman and Cohen. In terms of cognitive behavior, they cite multiple studies indicating that mastery-taught students are better able to exhibit the operant achievement behaviors required to answer essay-type items. These writings suggest that these behaviors included comprehension, application, analysis, synthesis, and evaluation (see Bloom, 1956). In particular, Block and Burns note, that, mastery students exhibited higher order respondent behaviors necessary to answer multiple-choice-type application and analysis items than they exhibited the lower order behaviors required to answer knowledge items.

Affective Outcomes

Bloom (1971, chap. 2), Block (1974, chap. 3), and Torshen (1977, chap. 7) have provided students of mastery learning and interested parties with an overview of the effectiveness of LFM (and PSI) with regard to the "feeling" or affective domain of school learning.

Torshen notes that perhaps the most significant outcomes of mastery learning, as many of its practitioners see it, lie in the Bloom (1956) domain of affective learning. She says:

> Practitioners have reported that students in mastery model curricula demonstrate increased interest in the subject matter and in learning, greater satisfaction with the academic curriculum, increased academic confidence, more positive perceptions of the self in school-related areas, and increased optimism concerning future performance. (p. 75)

Dr. Torshen further notes that in contrast with practitioners, researchers have tended to focus on the cognitive rather than affective outcomes of mastery learning.

One research study (Anderson et al., 1976) found that after a teacher-training program had employed a mastery curriculum, of the mastery participants, 100% gave affirmative, positive answers about their knowledge of and ability to teach mathematics. A significant fewer number of nonmastery curriculum participants gave affirmative responses to the 15-item questionnaire.

Parental Response to Mastery Learning. In the same research study conducted by Anderson et al., parents of students in the mastery curriculum responded, at a significant rate, more positively than did parents of students in the nonmastery curriculum with respect to the following items:

1. I received adequate information concerning the skills my child has in arithmetic.

2. I believe that the school is doing a satisfactory job of educating my child in arithmetic.

3. My child seems to enjoy arithmetic.

4. I believe that my child is learning the necessary math skills.

5. I believe my child is confident about his/her work in school.

6. I think my child is expected to learn an appropriate amount of arithmetic in an appropriate time (see Torshen, 1977, p. 79).

Student Response to Mastery Learning. Block's 1974 work, in brief, suggests the following results of mastery learning research with respect to students and the affective domain:

1. Mastery approaches to the teaching-learning process can generate high levels of positive student interest in and attitudes toward the topics learned.

2. Mastery approaches to the teaching-learning process seem to generate confidence in students regarding their ability to learn.

3. The available data indicate that over the short haul students enjoy mastery approaches to the teaching-learning process.

4. More research is needed to determine the long-term consequences of mastery learning, particularly with respect to possible mental health benefits (Block, 1974, pp. 50-51).

Mastery Learning and the Social Studies

Social Studies Defined and Distinguished

Kenworthy (1973, p. 13) points out that the field of social studies is almost limitless including the ideas, institutions, and interactions of human beings on our planet today and man's relationship to his environment. It includes the thoughts and activities of people throughout recorded history, with the millions of years prior to that time and the foreseeable future added. Social studies draws, in the main, upon the disciplines of anthropology, economics, geography, history, political science, psychology, and sociology. In general, the term "social studies" is used to apply to courses in elementary and secondary schools which draw from the preceding seven disciplines. For the most part, the term "social sciences" has been used to refer to subjects in college and universities, where they are studied in a more indepth and scientific manner.

The Textbook Curriculum

Ponder (1979) notes that a recently completed National Science Foundation study of precollege social studies in the

United States indicated that little has changed in social studies teaching either in terms of what is taught or how it is taught.

At all levels, the social studies curriculum is a textbook one. Teachers use the textbook to organize their courses, and students are exposed to social studies content through the pages of their books. Mastery learning, and teacher-centered systems-based instructional design in particular, offer social studies teachers with new and exciting methodological possibilities.

Mastery Learning Research in Social Studies

Perhaps the study of social studies, combined with teacher notions of past pedagogical practices, seems to be so complex that a more direct method of teaching (LFM) is apparently incompatible with long-held predispositions for inquiry, discovery, problem-solving, and decision-making. Whatever the case, it has been noted already (Rice, 1976) that there has been a lack of social studies research and teaching in the area of mastery learning. There exists, however, an accumulating body of evidence (Block & Tierney, 1974; Hymel & Mathews, 1980; Jones, 1974; Ware, 1977; Wyckoff, 1974) which suggests that mastery learning procedures within the social studies curriculum are possible. Though possible, mastery learning procedures have not been substantiated over a long period of time due to insufficient numbers of studies. In fact an examination of a few studies show inconclusive results (Pagan, 1975; Gaines, 1971; Ludwig, 1976; Myers, 1975).

Systems-Based Instructional Design

Design in Education

Pratt (1980) states that "a systematic approach to curriculum aims at improved design of learning situations" (p. 8). Noting Hall's classic text (1962), Pratt argues that design can make a number of specific contributions to education which are cited below:

1. Design focuses attention on goals. Specification of purposes is a necessary first step in design. Explicit statement of goals helps to ensure that goals are worthwhile and that they are clearly understood by participants.

2. Design increases the probability of success. Potential problems can be anticipated and costly delays prevented. In an unplanned operation, managers have to respond to criticism by making decisions on the basis of expediency; thus the critics rather than the management will control the operation and will either slow down its progress or subvert the entire operation to different goals.

3. Economy of time and effort is improved by design. Poor alternatives can be eliminated before they are implemented. Planning is more likely than ad hoc decision making to reveal the best routes to the objectives.

4. Design facilitates communication and coordination of projects. Actions can be synchronized and sequenced to make the best use of time and resources. Competition among groups and individuals pursuing independent goals is reduced.

5. Design reduces stress. This is particularly true in teaching, which is a stressful activity. Researchers have found that a teacher's pulse rate will often double during a lesson. The same research shows conclusively that unstructured and unplanned teaching is much more stressful than planned instruction (Doe, 1975).

Teaching As an Art

Over the years, many administrators and teachers have expressed reservations about applying the concept of design, with its implications of technique and prespecification, to the human and creative enterprise of teaching (Pratt, 1980, pp. 6-7). However, the weakness of the aforementioned view may lie in the misconception of the nature of art. Pratt indicates, "No matter what art is examined, one finds that it is not intuition and spontaneity (though both have a place) but design and technique that are crucial" (p. 6). Whether it be the great architect, dancer, painter, musician, sculptor, or actor, they all spend years developing and perfecting technique; design is the cornerstone of all their works.

Administrators and teachers should reevaluate the notions of art and teaching. Perhaps, as Pratt quoting Dudek points out, "Art is anything that people do with distinction" (see Colombo, 1976; Pratt, 1980, pp. 6-7).

CHAPTER 3

Materials and Procedures

Materials

It has been suggested by Hymel (1977) that the mechanism for accomodating mastery learning is referred to as systems-based instructional design (SBID). The preconditions and operating procedures for mastery learning (LFM) have been put forth in CHAPTER 2 of this work (pp. 13-15). For exemplary mastery instructional materials (instructional unit), see Appendix A.

Attention must now be focused on the materials which must be given due consideration before attempting to systematically design social studies instruction (or any other instructional area).

It is the contention of this study that, in addition to elements considered in the Review of Related Literature, at least two sets (three, if including checklists in Appendix A) of materials are required in order to effectively design instruction at its three levels, i.e., program syllabus, course syllabus, and instructional unit levels. Other criteria may be consulted, but for the purpose of this study the following are deemed critical: (1) Bloom's Taxonomy of Educational Objectives, and (2) the systems-based model for designing instruction (see Figures 1, 2, 3 & 4).

Procedures

Once the school administrator and/or teacher decide(s) to adopt a systems-based approach to designing instruction, then it becomes advisable to consider the procedures that result from examining the systems-based model for designing instruction which follows in Figure 1. Bloom's Taxonomy is considered after procedures for designing instruction at three levels are pictured and described (see Figures 2, 3 & 4).

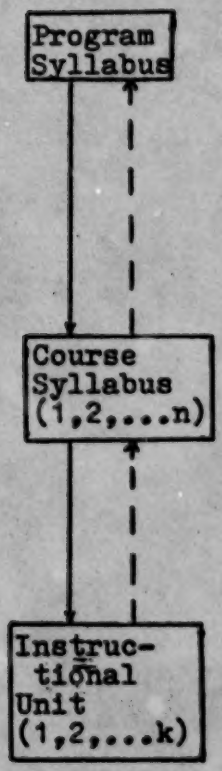

Fig. 1. Systems-Based Model For Designing Instruction (Hymel, 1977, p. 119)

Overview of Designing Instruction: A Description of Fig. 1

The model depicted on the preceding page may be read much the same way as a cookbook recipe--you do this, you do that and you have a pie.

When the administrator and teacher begin examining the nature and direction of an entire department's offerings and program in toto, e.g., social studies, it is incumbent upon them to follow the steps below:

1. Discuss/Debate/Evaluate the scope of the school's program in social studies. Board directives and curriculum guides are necessary considerations. Determine the major goals and rationale for the department after fully describing its program in narrative, written form (see Appendix A for Exemplary Program Syllabus). See Figure 2, with accompanying description, and Checklist in Appendix A for exact procedures.

2. Deduce from the program syllabus the number and kind of course offerings required to meet the department's major goals, consistent with departmental rationale (see Appendix A for Exemplary Course Syllabus). See Figure 3, with accompanying description, and Checklist in Appendix A for exact procedures.

3. Deduce from each of the course offerings the number of instructional units (modules) required to cover the contents of each of the courses (see Appendix A for Exemplary Instructional Unit). See Figure 4, with accompanying description, and Checklist in Appendix A for exact procedures.

4. After deciding upon a departmental program (syllabus), various course offerings (syllabi), and instructional units, the instructional designer is then provided with a flow of feedback from the component parts of the model as the result of their execution in the classroom situation (see dotted line in Figure 1). Constant evaluation and reevaluation occur ending in revision/modification of the program syllabus, course syllabus, or even the instructional unit.

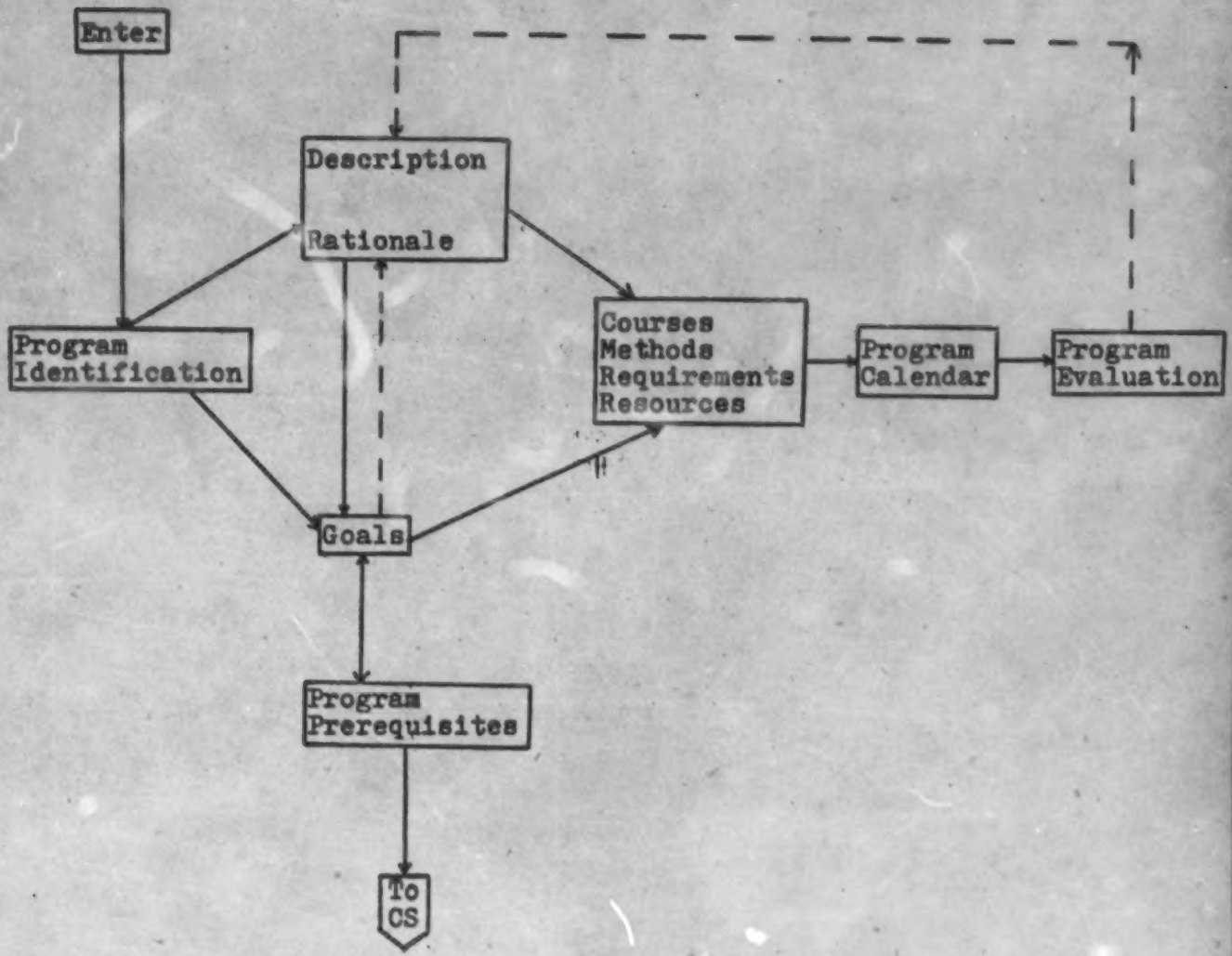

Fig. 2. Systems-Based Model For Designing A Program Syllabus (Hymel, 1977, p. 120)

Designing A Program Syllabus: A Description of Fig. 2

The boxes in Figure 2 refer to sets of procedures and techniques which are employed by the instructional designer to develop a program syllabus. The interconnected boxes (via dotted lines) represent feedback from one model component to another upon which revision/modification can be made.

Following are important steps which should evolve into a written program syllabus for a social studies department:

1. Program identification. This simple step involves clarifying the program at hand. An example would be, the Social Studies Curriculum of John F. Kennedy Senior High School.

2. Description. Describe in narrative form the subject-matter content of the program, e.g., subject-matter concerns include the American experience from 1492 to the present; the governmental, economic, social, psychological, and environmental problems of Americans are also examined. The description should also mention whether the intent of the program is to provide information, skills, attitudes, etc. A certain program may focus on information dissemination whereas another might emphasize the need to change attitudes in students. Still a third instructional program might aim to combine information with attitudes. Whatever the case, the instructional designer must describe the intentions of the program.

3. Rationale. State reasons for the existence of the program. Demonstrate to the student the need for participating in such a program.

4. Goals. Identify the broad areas for which program participation will render the student accountable. What will successful completion of the program enable the student to do?

5. Prerequisites. Identify the criteria which students have to meet for entry into the program, e.g., Board policies, geographical boundaries, special categories, academic requirements and/or recommendations, etc.

6. Course offerings. Specify by title (and course number, if pertinent) the various courses offered through the program.

7. Methods. List the different instructional modes to be employed by teachers in the program, e.g., lecture, discussion, recitation, demonstration, audio-visual reinforcement, etc.

8. Requirements. Identify and explain major requirements of the program as well as any corresponding deadlines, e.g., oral examinations, comprehensive examinations, practicums, and the like. Specify time dimensions.

9. Resources. Specify the general types of resources available for the program, e.g., textbooks for various courses, audiovisual materials, resource personnel, etc.

10. Program calendar. Specify the program calendar with an emphasis on correlating program courses with particular time frames in the program, e.g., U.S. history is required of all students in the tenth grade enrolled in the social studies program.

11. Program evaluation. Describe the categories of evaluation criteria to be used in the program with respect to teachers and students. For instance, student evaluation may be criterion referenced in nature whereas, teachers may be required to show evidence of instructional design skills.

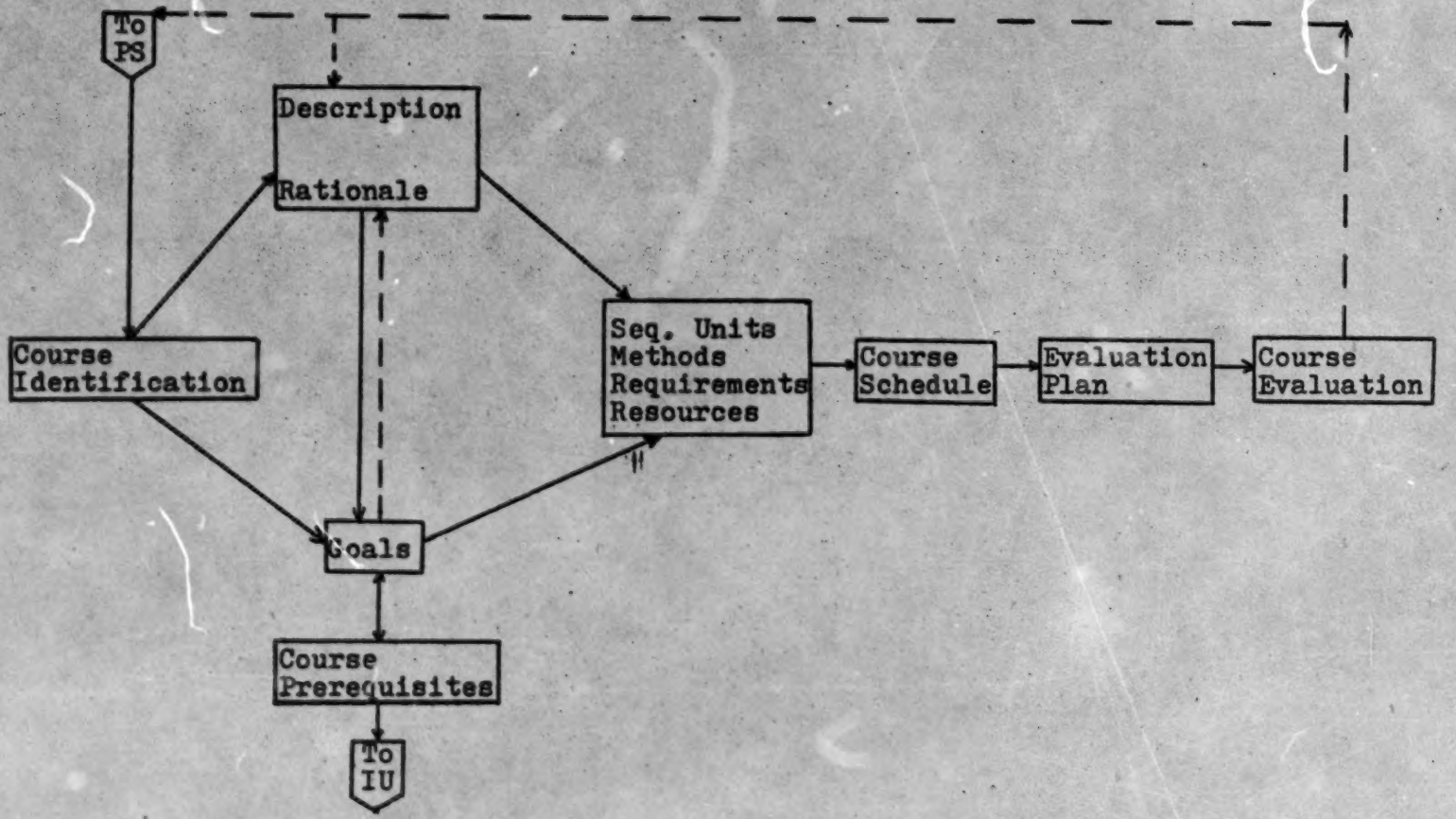

Fig. 3. Systems-Based Model For Designing A Course Syllabus (Hymel, 1977, p. 121)

Designing A Course Syllabus: A Description of Fig. 3

As in Figure 2, the boxes in Figure 3 refer to sets of procedures and techniques which are employed by the instructional designer to develop, in this instance, a course syllabus. Dotted lines represent the flow of feedback from one model component to another.

Following are important steps which should evolve into a written course syllabus for a social studies offering:

1. Course identification. The first step, simply, is to identify or name the particular course to be documented, e.g., United States History--First Semester. Also provide the instructor's name, time of class meeting, and room location.

2. Description. Describe in narrative form the subject-matter content of the course, e.g., . . . this course will focus on the following topics: European exploration of the New World, English colonization of America, the American Revolution, Independence and the Constitution, Jeffersonian democracy, the War of 1812, Jacksonian democracy, territorial expansion, and the Civil War and Reconstruction, etc. Furthermore, the description should point out the nature of the course's main emphasis, e.g., in social studies, political and social as opposed to economic and attitudinal.

3. Rationale. State the reasons for the inclusion of the course in the overall program. Demonstrate the need for the student to extend his/her knowledge into a course with which the student is unfamiliar.

4. Goals. List the goals or general objectives of the course. Upon completion of the course, what behaviors should the student exhibit? (Course goals should be reflective of at least one of the broader goals set forth in the program syllabus.)

5. Prerequisites. Identify the criteria which students have to meet for entry into the course, e.g., previous courses in the area or related fields, or even no prerequisites (merely enrollment in the school).

6. Sequence units. Briefly outline, in order, the various units comprising the course.

7. Methods. List the different instructional modes employed by the teacher of the course, e.g., simulation, role-playing, lecture-discussion, recitation, etc.

8. Requirements. Identify and explain major requirements (assignments) of the course as well as any corresponding deadlines, e.g., due dates for required readings, book reports, homework, special assignments, etc.

9. Resources. Specify the resources used in the course, e.g., textbooks, films, records, commercially-prepared handouts, etc.

10. Course schedule. Specify the course schedule correlating dates, class meetings, topics addressed, and assignments (see Appendix A, pp. 75-76, for an example of a course schedule).

11. Evaluation plan. Describe the evaluation plan for the course relative to evaluation approach (e.g., criterion-referenced), numerical range for grades, number and format of tests, value of written assignments, and method of determining the final course grade.

12. Course evaluation. Develop a course evaluation form which provides student feedback to the teacher regarding the course's effectiveness.

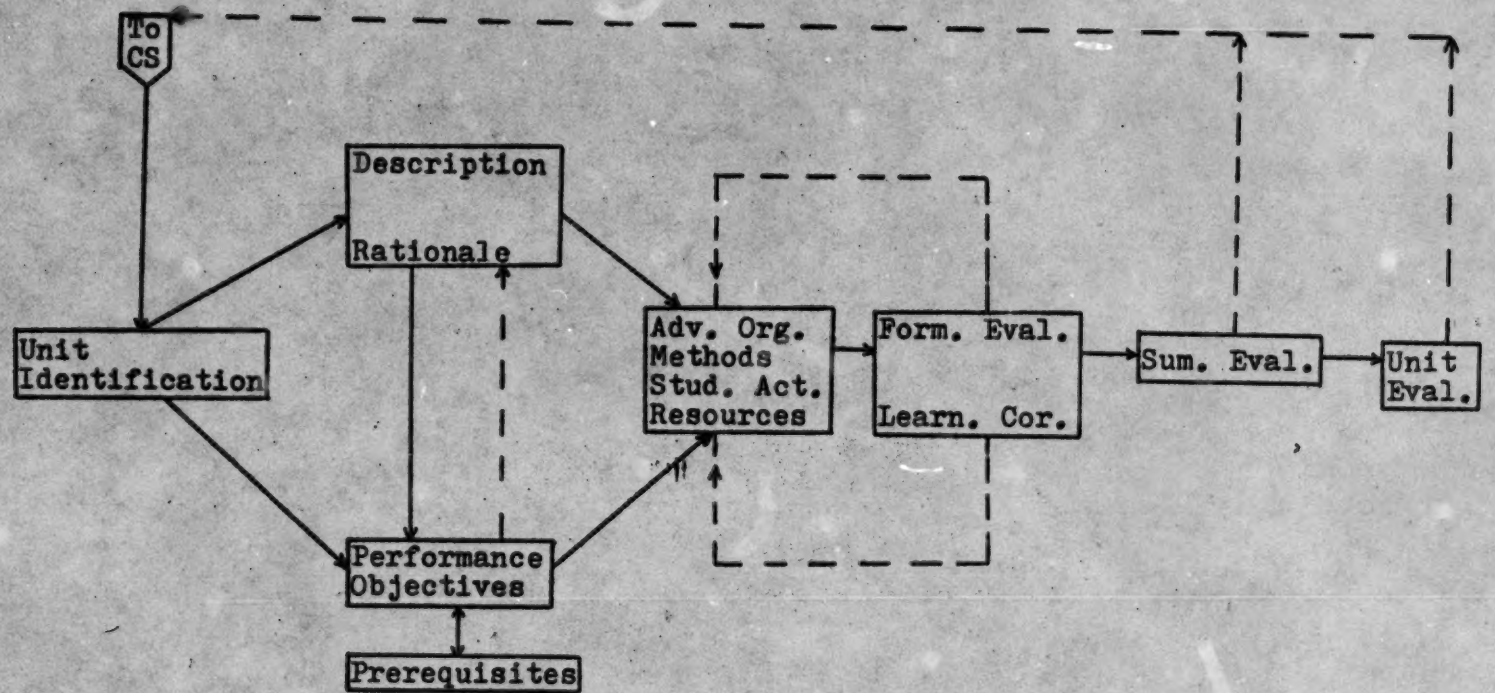

Fig. 4. Systems-Based Model For Designing An Instructional Unit (Hymel, 1977, p. 122)

Designing an Instructional Unit: A Description of Fig. 4

As in Figures 2 and 3, the boxes in Figure 4 refer to sets of procedures and techniques which are employed by the instructional designer to develop, in this instance, an instructional unit. Dotted lines represent the flow of feedback from one model component to another.

Following are important steps which should evolve into a written instructional unit deduced/derived from a given course offering:

1. Unit identification. Identify the topic addressed in the unit by name, e.g., "English Colonization of America."

2. Description. Describe in narrative form the subject-matter content of the unit, e.g., . . . the historical circumstances (events, places, and persons) surrounding the founding of Virginia, Massachusetts, Rhode Island, Connecticut, New Hampshire, Maryland, North Carolina, South Carolina, New York, New Jersey, Delaware, Pennsylvania, and Georgia are thoroughly examined, etc.

3. Rationale. State the reasons for the inclusion (and location if desirable) of the unit in the course. Why is the topic essential to the student's learning?

4. Performance objectives. List the performance objectives for the unit; communicate to the student the specific behaviors (learning) for which he/she will be held accountable subsequent to instruction. Identify the proficiency level at which mastery of the performance objectives is determined to have taken place, e.g., 90% mastery of learning tasks/performance objectives.

5. Prerequisites. Identify and/or formulate a test for prerequisite competencies. Gagné (1977) suggests that new learning is built upon old learning--a condition he refers to as "chaining." The designer of an instructional unit needs to identify what "old learnings," if any, are required for that which the student is about to be engaged.

6. Advance organizer. Outline in detail (via an advance organizer) the various topics and subtopics comprising the unit. The organizer, made available to students, helps them relate specific information to their general knowledge, thus increasing the familiarity and learnability of new material (see Appendix A, pp. 84-88, for an example of an advance organizer).

7. Methods. Identify the different instructional modes to be used in the unit, e.g., lecture, discussion, recitation, audio-visual reinforcement, etc.

8. Student activities. Identify the different learning activities which students will engage in as they participate in the unit, e.g., completing assigned readings, participation in discussions, viewing learning media such as films/filmstrips/videotapes, writing responses to performance objectives, etc.

9. Resources. Specify the resources utilized in the unit, e.g., specific basic and supplementary textbooks, certain 16 mm films, guest speakers, etc.

10. Formative evaluation. Construct a formative test which relates to the unit's performance objectives and which serves a diagnostic purpose--to be used intermittently throughout the unit of instruction (see Appendix A, pp. 90-93, for an example of a formative test).

11. Learning correctives. (a) Identify various activities and assignments of a review and/or remedial nature to which a student would be referred (recycled) in order to correct some learning deficiency revealed by a formative test (see Appendix A, pp. 95; 97, for an exemplary set of learning correctives geared to a particular unit). (b) Prepare a form reporting the results of the formative test and establishing a correspondence between missed items and learning correctives (see Appendix A, pp. 94; 96, for an exemplary report form for a unit formative test).

12. Summative evaluation. Construct a summative test which relates to the unit's performance objectives and which is used to finalize a student's grade for the unit. Most teachers are familiar with this concept.

13. Unit evaluation. Construct a unit evaluation form used to facilitate student feedback to the teacher relative to the unit's effectiveness (see Appendix A, pp. 101-102, for an example of a unit evaluation form).

Bloom's Taxonomy of Educational Objectives: A Basis for Determining Program, Course, and Unit Goals/Objectives

When engaged in developing appropriate goals for a program or particular course and formulating precise objectives for an instructional unit, the designer of instruction (e.g., an administrator charged with social studies instruction or a social studies teacher) begins by identifying which of the following learning domains he/she wishes to concentrate the most effort (perhaps exclusive): (1) cognitive, (2) affective, and/or (3) motor-skill (see Bloom, 1956).

The program syllabus, course syllabus, and instructional unit found in Appendix A represent, exclusively, those behaviors associated with Bloom's cognitive domain. Bloom notes, " . . . the taxonomy will probably include a greater variety of behaviors than those emphasized by any one school, course, or educational philosophy" (pp. 14-15). Furthermore, he adds, "It (cognitive domain) is the domain in which most of the work in curriculum development has taken place (still today) and where the clearest definitions of objectives are to be found phrased as descriptions of student behavior" (p. 7).

With respect to affective learning, Bloom points out:

> It is difficult to describe the behaviors appropriate to these objectives since the internal or covert feelings and emotions are as significant for this domain as are the overt behavioral manifestations. Then, too, our testing procedures for the affective domain are still in the most primitive stages. (p. 7)

Additionally, Ponder (1979) emphasizes that most social studies instructors (at all levels) have been reluctant to do affective teaching in their classrooms. However, a few writers (including Mager, 1972) suggest the possibility of such teaching. (See Krathwohl et al., 1964, for the classification of affective goals.)

Many educators (or at least some) believe today as Bloom believed in 1956 with respect to the motor-skill domain:

> Although we recognize the existence of this domain, we find so little done about it in secondary schools or colleges, that we do not believe the development of a classification of these objectives would be very useful at present. (pp. 7-8)

Certainly, many social studies teachers would be hard-pressed to include psycho-motor behaviors in their courses or units.

Perhaps by default, or by its very nature, social studies instruction continues to be concerned, in the main, with the cognitive domain. Curriculum revisions of the 1960s and 1970s have had little impact in moving social studies teaching/learning away from the cognitive areas of concern (see Ponder, 1979).

Why specify program, course, and/or unit goals/objectives? Bloom (1956) states, "It is important that the major objectives of the school or unit of instruction be clearly identified if time and effort are not to be wasted on less important things and if the work of the school is to be guided by some plan" (p. 26). He further notes:

> The formulation of educational objectives (and goals) is a matter of conscious choice on the part of the teaching staff, based on previous experience and aided by consideration of several kinds of data. The final selection and ordering of the objectives become a matter of making use of the learning theory and philosophy of education which the faculty accepts. (p. 26)

Basis for selecting goals/objectives. In addition to the consideration of the three domains of learning, especially the cognitive described on the pages that follow, the instructional designer should be familiar with the sources of goals and objectives.

On pages 26 and 27 of Bloom's now classic Taxonomy, five possible sources of goals and objectives are cited. They are:

1. Information available about students. What is their present level of development? What are their needs? What are their interests?

2. Conditions and problems of contemporary life. What are the activities that individuals are expected to perform? What are the problems they are likely to encounter? What are the opportunities they are likely to have for service and self-realization?

3. Nature of the subject matter and the deliberations of subject-matter specialists. What is the conception of the subject field? What are the types of learning which can

arise from a study of that subject matter? What are the contributions that the subject can make in relation to other subjects?

4. School's philosophy of education. What is the "good life for the individual in the good society?" What are the important values? What is the proper relation between man and society? What are the proper relations between man and man?

5. A psychology of learning. The faculty must distinguish goals that are feasible from goals that are unlikely to be attained in the time available, under the conditions which are possible, and with the group of students to be involved.

It should be clear from the above that objectives are not only the goals toward which the curriculum is shaped and toward which instruction is guided, but they are also the goals that provide the detailed specification for the construction and use of evaluative techniques, e.g., formative and summative tests.

The taxonomy. The cognitive objectives which are derived from a process similar to that described above, fall in one of six major classes listed on the following page:

1. Knowledge
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation

The administrator and teacher who are interested in formulating goals for their social studies program or particular course or prescribing meaningful, useful performance objectives for a given instructional unit, should review each of the above six classes. To do otherwise, might result in an unarticulated hodgepodge of one individual's interests. Goals and objectives for the program/course/unit should encompass not only the simple behaviors such as remembering or recalling information, but also the more complex behaviors of abilities and skills such as comprehension, application, analysis, synthesis, and evaluation (Bloom, 1956, p. 28).

The following is a more detailed look at Bloom's six classifications. (For an extensive, comprehensive discussion of the cognitive domain, see Bloom's Taxonomy of Educational Objectives: Handbook I, Cognitive Domain, 1956.)

1. Knowledge. Knowledge, as defined here, involves the recall of specifics and universals, the recall of methods and procedures, or the recall of a pattern, structure, or setting. For measurement purposes, the recall situation involves little more than bringing to mind the appropriate material. The know-

ledge objectives emphasize most the psychological process of remembering.

2. Comprehension. This represents the lowest level of understanding or apprehension such that the individual knows what is being communicated and can make use of the material or idea being communicated without necessarily relating it to other material or seeing its fullest implications.

3. Application. The use of abstractions in particular and concrete situations. The abstractions may be in the form of general ideas, rules of procedures, or generalized methods. The abstractions may also be technical principles, ideas, and theories which must be remembered and applied.

4. Analysis. The breakdown of a communication into its constituent elements or parts such that the relative hierarchy of ideas is made clear and/or the relations between the ideas expressed are made explicit. Such analyses are intended to clarify the communication, to indicate, how the communication is organized, and the way in which it manages to convey its effects, as well as its basis and arrangement.

5. Synthesis. The putting together of elements and parts so as to form a whole. This involves the process of working with pieces, parts, elements, etc., and arranging and combining them in such a way as to constitute a pattern or structure not clearly there before.

6. Evaluation. Judgments about the value of material and methods for given purposes. Quantitative and qualitative judgments about the extent to which material and methods satisfy criteria. Use of a standard of appraisal. The criteria may be those determined by the student or those which are given to him. (pp. 187-193)

Social studies educators utilize the above classifications to help shape the goals and objectives of their programs, courses, and units. Following are specific examples of some instructional objectives as fitted to each of Bloom's classes:

1. Knowledge. (1) Students can list the Thirteen Original Colonies; (2) Students can* describe orally the conditions that encouraged the English colonization of America; (3) Students can match specific events with the following dates: 1492, 1607, 1630, and 1732.

2. Comprehension. (1) Given a list of different methods for founding colonies in America, a student can** explain orally how each of these might have affected contemporary American social institutions; (2) Given the name of Elizabeth I, students will*** classify her as representing the "great person" interpretation of history; (3) Students will be able to describe how the following items influenced colonization of America: social conditions in Europe, trade, and commerce.

*describe : may be considered comprehension in given situations
**explain : may be considered analysis " " "
***classify : may be considered application " " "

3. Application. (1) Students can apply knowledge of decision-making strategies to a case study of Thomas Hooker's decision to settle the Connecticut Valley; (2) Students can apply the concept of democracy to the drawing up of the Mayflower Compact; (3) Students can apply their understanding of "proprietary colonies" by describing the events leading up to the founding of the Carolina colonies.

4. Analysis. (1) Students can *prepare a formal debate on the topic: Resolved, That the differences between the founding of Plymouth Rock and Massachusetts Bay colonies were minimal; (2) Students will be able to analyze the reasons and conditions leading to the English takeover of New Netherland; (3) Students will be able to analyze the tenents of the Fundamental Orders of Connecticut.

5. Synthesis. (1) Imagining themselves to be early Virginia colonists, students can write a letter to King James arguing for the right to own private property in the New World including a statement assessing long-range effects of such an action if the King were to grant their request; (2) Posing as King James of England, students can propose a policy position with respect to the private ownership of property in the New World; (3) Students can demonstrate their knowledge of "rhetoric" by devising a strategy (being early colonists) to deceive King James, thus enabling the "Separatists" to make the trek from Holland to Plymouth Rock, Massachusetts.

*prepare: may be considered synthesis in given situations

6. Evaluation. (1) Students can write an opinion on whether or not slavery should have been outlawed during the initial stages of English colonization; (2) Students can judge the merits of arguments by those favoring Dutch rule of colonial New Netherland (New York); (3) Students can evaluate and state an opinion with respect to the "Quaker influence" in North America.

Ehman, Mehlinger, and Patrick (1974) remind social studies educators that:

> Schemes for categorizing cognition are not cited with the objective that teachers become highly skilled classifiers of levels of learning. Rather the objective is to alert them to the possibilities for planning lessons that require students to function at the higher levels of the cognitive domain. (p. 120)

Ehman et al. pose the following defense of the "cognitive emphasis" in social studies teaching/learning:

> A most relevant social studies curriculum yields a continually applicable social education. Such an education consists of learning the intellectual skills associated with history and the social sciences. Mastery of these skills enables one to formulate problems and hypotheses; to gather, to organize, and to interpret information; to use evidence to confirm or reject hypotheses; and to extrapolate from the known to highly reasonable speculation about the unknown. (p. 125)

Ausubel (1968) maintains that with most students of secondary school age, verbal exposition (such as common now in many social studies lessons) is actually the most efficient way of teaching subject matter and leads to sounder and less trivial knowledge than when students serve as their own pedagogues. Ausubel's advance organizer (see p. 5), simply put, is but a way to design verbal exposition for effective cognitive learning on the part of students. Ehman et al. (1974) point out that, "Properly designed expository instruction can be highly stimulating and produces higher-level cognition and learning" (p. 141).

Suffice it to say, that administrators and teachers void of knowledge of the Taxonomy are hardly in a position to construct meaningful goals and objectives for instruction. To worsen matters, unless teachers and students understand what is to be accomplished, it is unlikely that instruction can proceed effectively.

CHAPTER 4

Data Analysis

Action Research

According to Isaac and Michael (1971), the purpose of action research is, "to develop new skills or new approaches and to solve problems with direct application to the classroom or working world setting" (p. 27). It, like the intention of this field-related study, is practical and directly relevant to an actual situation in the working world (see Need for the Study, pp. 3-4).

Borg and Gall (1979) relate:

> The emphasis in action research is not on obtaining generalizable scientific knowledge about educational problems, but on obtaining knowledge concerning a specific local problem. . . The principal advantage of action research is that it provides the teacher or administrator in the field with objective, systematic techniques of problem solving that are far superior to an appeal to authority or reliance on personal experience, which so often guides decisions in education. (p. 38)

LFM (ML) and SBID: A Practical Analysis

No statistical techniques were employed in this study. However, three checklists (see Appendix A) representing the

three levels of instructional design have been included to help the designer of instruction, administrator or teacher, verify his or her steps in the instructional design process. In addition, exemplary social studies materials, designed for mastery teaching (see pp. 13-15) and in accordance with the procedures of systems-based instructional design (see pp. 25-40), have been included in Appendix A for inspection/ examination.

Beyond the technical requirements suggested by systems-based models, checklists, preconditions, and mastery operating procedures, actual classroom experimentation may produce yet the best analysis of mastery teaching in the social studies via systems-based instructional design.

CHAPTER 5

Summary, Conclusions, Recommendations, and Implications

Summary and Conclusions

The purpose of this study was to provide school administrators and teachers in the field with information and tools needed to design a systems-based mastery approach to social studies teaching/learning.

It has been noted, via the following recapitulation, that:

1. The basic philosophy, concepts, and terminology associated with mastery learning and systems-based instructional design have been put forth on pages 1-2 and 5-8, and interwoven throughout the text;

2. A review of related literature, both conceptual and field-related, with respect to mastery learning, social studies teaching, systems-based instructional design, and Carroll's model of school learning has been conducted and cited in CHAPTER 2;

3. A review of Bloom's taxonomy of educational objectives as a basis for determining program, course, and unit goals/objectives for the social studies has been carried out in pages 41-50;

4. Necessary flowcharts for designing instruction have been depicted (see pp. 26, 29, 33, and 37 respectively) and discussed (see pp. 27-28, 30-32, 34-36, and 38-40 respectively). The checklists for designing instruction, another valuable tool for the designer of instruction, have been placed in Appendix A; and

5. Exemplary program syllabus, course syllabus, and instructional unit in the social studies designed for group-based mastery teaching and developed with respect to systems-based instructional design have been formulated and placed in Appendix A for the administrator and/or teacher to examine.

By referring to each of the above five items and devoting careful, due consideration for each, the administrator or teacher should thus come to a basic understanding of the procedures (and knowledge) utilized to systematically design mastery approaches to social studies teaching.

Recommendations

The following recommendations are made to administrators and teachers:

1. Before engaging in a strategy to systematically design instruction in social studies (or any subject matter area), agree upon a philosophical position. It is unlikely that teachers who view learning from a strict humanistic standpoint will readily accept, much less ever accept, a more behavioral approach to teaching and learning (see next page). Commenting on

the efforts of New Orleans school officials to implement a mastery learning program, ex-Superintendent Geisert (1979) points out that, "Another problem is getting teachers and administrators to alter their educational philosophy to conform with that of SCIP (the mastery learning program)" (p. 134).

a. Humanism. Dick and Carey (1978) note that, in essence, the humanistically oriented teachers believe that there is no best way to manage a classroom or to organize a learning exercise. They believe there exists no single formula for effective teaching, but rather a number of formulas.

b. Behaviorism. Behaviorally oriented teachers tend to view the instructor as the one responsible for instruction in cultural heritage, social responsibilities, and specific subject matter. They believe that these matters can not be left to the individual interests of students alone. This type of teacher emphasizes a carefully prepared lesson plan (instructional unit), logically organized material, and specific educational objectives. In essence, these individuals prefer a systematic approach to teaching which utilizes research knowledge on the conditions of learning (or models of school learning such as Carroll's) required for students to achieve clearly defined outcomes.

Administrators and teachers interested in mastery learning would do well to be obliged to a behavior-oriented approach to teaching/learning. Success is dubious otherwise.

2. Study the literature with respect to mastery learning, social studies teaching, systems-based instructional design, and Carroll's model of school learning.

3. Determine the scope of the social studies program, i.e., designed to prepare students for the world of work, creative and artistic experiences, citizenship, leisure time, and/or future academic pursuits in college. Determine what courses will be needed to carry out the program. Formulate specific units of instruction for each of the program's courses. Proceed with all of the foregoing coinciding with a careful study of Bloom's Taxonomy. Goals/Objectives required.

4. Study carefully and follow the procedures suggested by the various flowcharts and checklists contained herein when developing a program syllabus, course syllabi, and instructional units.

5. View exemplary materials, contained herein or elsewhere, that have been designed via a systems approach for social studies education.

6. Consult outside resource personnel or experts in mastery learning and systems-based instructional design.

7. Be patient.

Implications for Further Study

The following are implications for further study:

1. An action project designed to look at the extent to which a local high school has developed materials in accordance

with the flowcharts and checklists contained herein should prove quite valuable and bear implications with respect to the concept of systems-based instructional design for that particular school.

2. A full-blown research study (characterized by the utmost scientific rigor) measuring the knowledge of school administrators and teachers in a school district purporting to use systems-based instructional modes, such as mastery learning, should prove valuable and quite interesting. (New Orleans Public Schools constitute such a school district.)

3. An action study designed to ascertain effective procedures for designing and implementing inservice experiences in mastery learning and systems-based instructional design for administrators and teachers should prove quite helpful to school districts interested in implementing a mastery learning project.

REFERENCES

Abrams, J. D. Mastery learning in a smaller school system. Educational Leadership, 1979, 37, 136-139.

Anderson, L. W., Scott, C. C., & Hutlock, J., Jr. The effects of a mastery learning program on selected cognitive, affective and ecological variables in grades 1 through 6. Paper presented to the annual meeting of the American Educational Research Association, San Francisco, 1976.

Aus[illegible]l, D. P. The psychology of meaningful verbal learning. New York: Grune & Stratton, 1963.

Ausubel, D. P. Educational psychology: A cognitive view. New York: Holt, Rinehart and Winston, 1968.

Block, J. H. (Ed.). Mastery learning: Theory and practice. New York: Holt, Rinehart and Winston, 1971.

Block, J. H. Teachers, teaching, and mastery learning. Today's Education, 1973, 63, 30-36.

Block, J. H. (Ed.). Schools, society, and mastery learning. New York: Holt, Rinehart and Winston, 1974.

Block, J. H., & Anderson, L. W. Mastery learning in classroom instruction. New York: Macmillan, 1975.

Block, J. H., & Burns, R. B. Mastery learning. In L. S. Shulman (Ed.), Review of research in education (Vol. 4). Itasca, Illinois: F. E. Peacock Publishers, Inc., 1976.

Block, J. H., & Tierney, M. An exploration of two correction procedures used in mastery learning approaches to instruction. Journal of Educational Psychology, 1974, 66, 962-967.

Bloom, B. S. (Ed.). Taxonomy of educational objectives. The classification of educational goals. Handbook I, Cognitive domain. New York: David McKay, 1956.

Bloom, B. S. Learning for mastery. UCLA-CSEIP Evaluation Comment, 1968, 1, No. 2.

Bloom, B. S. Mastery learning and its implications for curriculum development. In E. W. Eisner (Ed.), Confronting curriculum reform. Boston: Little, Brown, 1971.

Bloom, B. S. Human characteristics and instruction: A theory of school learning. New York: McGraw-Hill, 1976.

Borg, W. R., & Gall, M. D. Educational research (3rd ed.). New York: Longman, Inc., 1979.

Burns, R. B. Mastery learning: Does it work? Educational Leadership, 1979, 37, 110-113.

Carroll, J. B. A model of school learning. Teachers College Record, 1963, 64, 723-733.

Colombo, J. R. (Ed.). Colombo's concise Canadian quotations. Edmonton, Canada: Hurtig Publishers, 1976.

Dick, W., & Carey, L. The systematic design of instruction. Dallas: Scott, Foresman and Company, 1978.

Doe, B. Shape of a lesson. Times Educational Supplement, December 5, 1975.

Ehman, L., Mehlinger, H., & Patrick, J. Toward effective instruction in secondary social studies. Boston: Houghton Mifflin Company, 1974.

Fagan, J. S. Mastery learning: The relationship of mastery procedures and aptitude to the achievement and retention of transportation-environmental concepts by seventh grade students. (Doctoral dissertation, University of Georgia, 1975). Dissertation Abstracts International, 1975, 36, 5981-A. (University Microfilms No. 76-6402, 213).

Gagné, R. M. Conditions of learning (3rd ed.). New York: Holt, Rinehart and Winston, 1977.

Gaines, W. G. An application of John B. Carroll's model of school learning to the teaching of anthropology. (Doctoral dissertation, University of Georgia, 1971). Dissertation Abstracts International, 1971, 32, 5669-A. (University Microfilms No. 72-10959, 250).

Geisert, G. SCIP: A New Orleans solution to a national problem. Educational Leadership, 1979, 37, 128-134.

Hall, A. D. A methodology for system's engineering. New York: Van Nostrand, 1962.

Hyman, J. S., & Cohen, S. A. Learning for mastery: Ten conclusions after 15 years and 3,000 schools. Educational Leadership, 1979, 37, 104-109.

Hymel, G. M. Instructional design. New Orleans: Loyola University, 1977.

Hymel, G. M., & Mathews, G. S. Effects of a mastery approach on social studies achievement and unit evaluation. The Southern Journal of Educational Research, 1980, 14, 191-204.

Isaac, S., & Michael, W. B. Handbook in research and evaluation. San Diego, Calif.: Robert R. Knapp, 1971.

Jones, F. G. The effects of mastery and aptitude on learning, retention, and time. (Doctoral dissertation, University of Georgia, 1974). Dissertation Abstracts International, 1974, 35, 6537-A. (University Microfilms No. 75-8156, 476).

Keller, F. S. Good-bye, Teacher . . . Journal of Applied Behavior Analysis, 1968, 1, 78-79.

Kenworthy, L. S. Guide to social studies teaching. Belmont, Calif.: Wadsworth Publishing Company, Inc., 1973.

Kim, H. Mastery learning in the Korean middle schools, UNESCO, 1971. In K. P. Torshen, The mastery approach to competency-based education. New York: Academic Press, 1977.

Kim, H., et al. An application of a new instructional model (research report No. 8). Seoul: Korean Educational Development Institute, 1974.

Krathwohl, D. R., Bloom, B. S., & Masia, B. B. Taxonomy of educational objectives. The classification of educational goals. Handbook II, Affective domain. New York: David McKay, 1964.

Lee, Y. D., et al. Interaction improvement studies on the mastery learning project, Final report on mastery learning April-November, 1971. In K. P. Torshen, The mastery approach to competency-based education. New York: Academic Press, 1977.

Ludwig, L. M. Aptitude and mastery learning in a personalized, taxonomy-based community college social science course. (Doctoral dissertation, Kent State University, 1976). Dissertation Abstracts International, 1976, 37, 7512-A. (University Microfilms No. 77-12432, 215).

Mager, R. F. Goal analysis. Belmont, Calif.: Fearon Publishers, 1972.

Myers, R. R. The effects of mastery and aptitude on achievement and attitude in an introductory college geography course. (Doctoral dissertation, University of Georgia, 1975). (ERIC Document Reproduction Service No. ED 120 035).

New Orleans Public Schools. SCIP: Secondary curriculum improvement program (Information Bulletin No. 2). New Orleans, Louisiana, 1978.

Pratt, D. Curriculum design and development. New York: Harcourt Brace Jovanovich, Inc., 1980.

Ponder, G. The status of social studies. Educational Leadership, 1979, 36, 515-518.

Rice, M. J. Variables in mastery learning. Is a mastery model appropriate to the social studies? Paper presented to the annual meeting of the American Educational Research Association, San Francisco, 1976. (ERIC Document Reproduction Service No. ED 124 463).

Torshen, K. P. The mastery approach to competency-based education. New York: Academic Press, 1977.

Ware, A. E. A comparison of two mastery learning strategies relative to the effects upon achievement, retention, transfer and attitudes. (Doctoral dissertation, University of Washington, 1977). Dissertation Abstracts International, 1977, 38, 3264-A. (University Microfilms No. 77-26876, 162).

Wyckoff, D. B. A study of mastery learning and its effects on achievement of sixth grade social studies students. (Doctoral dissertation, Georgia State University, 1974). Dissertation Abstracts International, 1974 35, 5160-A. (University Microfilms No. 75-3748, 128).

APPENDIX A

Checklist for Designing A Program Syllabus
Exemplary Program Syllabus
Checklist for Designing A Course Syllabus
Exemplary Course Syllabus
Checklist for Designing An Instructional Unit
Exemplary Instructional Unit

CHECKLIST FOR DESIGNING A PROGRAM SYLLABUS
(Hymel, 1977)

		Check When Completed
1.	Identify the program by name.	_____
2.	Describe in narrative form the subject-matter content of the program.	_____
3.	State the rationale for the existence of the program.	_____
4.	List the goals of the program.	_____
5.	Determine program prerequisites.	_____
6.	Outline the various courses which comprise the program (or just list).	_____
7.	Identify the broad categories of instructional methods employed in the program.	_____
8.	Identify and explain major requirements of the program as well as their corresponding deadlines, if any.	_____
9.	Specify the general types of resources available for the program.	_____
10.	Specify the program calendar with an emphasis on correlating program courses with the appropriate time frames in the program.	_____
11.	Describe the categories of evaluation criteria to be used in the program regarding students and instructors.	_____

EXEMPLARY PROGRAM SYLLABUS

SOCIAL STUDIES CURRICULUM OF JOHN F. KENNEDY SENIOR HIGH SCHOOL

PROGRAM DESCRIPTION

The social studies curriculum of John F. Kennedy Senior High School is designed to provide high school students with the necessary information, skills, and attitudes needed to meet the challenges of a changing society. In order to provide the essential foundation important in confronting society's challenges, students of Kennedy High are offered a variety of courses. Subject-matter concerns include the events, places, and persons responsible for the American experience from 1492 to the present; the governmental, economic, social, psychological, and environmental problems of Americans are also examined.

PROGRAM RATIONALE

In order for an individual to be a well-rounded person capable of contributing to and functioning in today's complex society, it is necessary for him or her to have an understanding of the differing areas constituting the social sciences. Human behavior, in all of its manifestations, should be explored to the fullest if one is to better understand his/her world.

PROGRAM GOALS

Upon completion of the social studies program, the student, in addition to performing the skills made explicit in Helen M. Carpenter's Skill Development in Social Studies, should be able to do the following things:

1. Identify and understand the historical circumstances (events, places, and persons) surrounding the evolutionary development of the United States of America.

2. Comprehend the role of government and citizenship in the development of the American experience.

3. Determine the role of economics and the free enterprise system in today's complicated American society.

4. Identify and discuss the various movements and trends affecting contemporary American society.

5. Know the components necessary for good mental health and how they contribute to a better society.

6. Determine the physical and cultural phenomena making up one's environmental surroundings.

PREREQUISITES

Student entry into the social studies program of Kennedy Senior High School is contingent upon the guidelines set forth by the Orleans Parish School Board, i.e., a student must live in the school district comprising Kennedy's boundaries or be given special permission to attend Kennedy by central office administrative personnel.

For college-bound students, there are special entry requirements as set forth by the Council of the Expanded Academic Component. (see EAC Bulletin at 4100 Touro Street or at KSHS at 5700 Wisner Boulevard)

Furthermore, it is recommended by the social studies faculty that students entering the program possess an achievement level in reading of 9.0 on the reading section of the CTBS (or its equivalent) or enroll in Kennedy's reading program through the language arts department. This is recommended for those students who desire the probability of success in the social studies curriculum.

COURSE OFFERINGS

1. United States History: First Semester
   Course No. 43260

2. United States History: Second Semester
   Course No. 43261

3. United States History: Independent Projects
   Course No. 43245

4. Civics: First Semester
   Course No. 42131

5. Civics: Second Semester
   Course No. 42133

6. Free Enterprise
   Course No. 45531

7. Psychology
   Course No. 44401

8. Sociology
   Course No. 44584

9. World Geography: First Semester
   Course No. 45101

10. World Geography: Second Semester
    Course No. 45102

INSTRUCTIONAL METHODS

1. Lecture
2. Discussion
3. Readings (Assigned & Optional)
4. Audio-Visual Reinforcement
5. Demonstration
6. Simulation/Role-Playing

PROGRAM REQUIREMENTS

Each student is to pass a comprehensive examination divided into three major areas: (1) United States History, (2) Civics, and (3) Free Enterprise. (The test itself will be formulated by the KSHS social studies faculty.) In addition to this requirement, EAC students must pass a fourth segment of the comprehensive examination dealing with concepts and principles of sociology.

Comprehensive examinations are to be given at the end of a student's academic preparation in the social studies. The exams will be graded on a pass/fail basis. A student failing the comprehensive examination will be allowed to petition for a second test to be administered no sooner than two weeks after the initial comprehensive examination. Study guides will be issued to all social studies students in their last semester of the social studies curriculum to help them prepare for the comprehensive examination. (Both semesters of U.S. history, both semesters of civics, and the one-semester course in free enterprise are required for graduation in Louisiana (2½ units). An additional semester-long course in sociology is required of KSHS students enrolled in the EAC program.)

RESOURCES

A. Books:

1. United States History

a. Roberts, P. M. United States history review text. New York: AMSCO School Publications, Inc., 1973.

b. Ver Steeg, C., & Hofstadter, R. A people and a nation. New York: Harper & Row, 1971.

c. Wade, R. C., Wilder, R. B., & Wade, L. C. A history of the United States. New York: Houghton Mifflin Company, 1968.

2. Civics

a. Dimond, S. E., & Pflieger, E. F. Our American government. Chicago: J. B. Lippincott Company, 1960.

b. Hartley, W. H., & Vincent, W. S. American civics. New York: Harcourt Brace Jovanovich, Inc., 1974.

c. Smith, H. P., Tiegs, E. W., & Adams, F. Your life as a citizen. Boston: Ginn and Company, 1967.

3. Free Enterprise

a. Bauer, W. W. (Ed.). Free enterprise in America. New York: Harcourt Brace Jovanovich, Inc., 1977.

b. Goodman, K. E., & Harriss, C. L. Economics--An analytical approach. Boston: Ginn and Company, 1966.

4. Psychology

a. Engle, T. L., & Snellgrove, L. Psychology--Its principles and applications (6th ed.). New York: Harcourt Brace Jovanovich, Inc., 1974.

b. Sorenson, H., Malm, M., & Forehand, G. A. Psychology for living (3rd ed.). New York: Webster Division, McGraw-Hill Book Company, 1971.

5. Sociology

   a. Koller, M. R., King, D. C., & Couse, H. C. Modern sociology. New York: Holt, Rinehart, and Winston, Inc., 1974.

6. World Geography

   a. Israel, S., Johnson, D. L., & Wood, D. World geography today. New York: Holt, Rinehart, and Winston, Inc., 1976.

B. Audio-Visual Materials

1. Thermofax, dittos, and transparencies
2. Overhead projectors
3. Maps and globes
4. Opaque projectors and flat pictures
5. Bulletin boards and chalk boards
6. Time-lines
7. Films and slide projectors
8. Realia
9. Television

C. Resource Personnel

1. Benjamin G. Katz, Coordinator of Community Resources/ Office of School Volunteer Services, New Orleans Public Schools

PROGRAM CALENDAR

A. Sophomore Year
   1. U.S. History: First Semester (R)
   2. U.S. History: Second Semester (R)
   3. World Geography: First Semester (E)
   4. World Geography: Second Semester (E)

B. Junior Year
   1. Civics: First Semester (R)
   2. Civics: Second Semester (R)
   3. Both semesters of World Geography may be elected by a student.
   4. Psychology (1 semester only-E)
   5. Sociology (1 semester only-E)

C. Senior Year
1. Free Enterprise (1 semester only-R)
2. Both semesters of World Geography may be elected by a student.
3. Psychology or Sociology may be elected by a student. (Sociology is required for students enrolled in the EAC program.)

*R=Required Course
E=Elective Course

EVALUATION OF PROGRAM

The evaluation of the academic performance of students enrolled in social studies courses at Kennedy Senior High School is criterion-referenced in nature, i.e., a student's grade will be based upon how well he or she masters the subject matter and meets the objectives of a given course. Students will not be evaluated on rank in class or by any other similar curve situation. In order for students and teachers to monitor student progress at various points in instruction, Kennedy social studies instructors will implement the use of formative evaluation procedures. (see chap. 6 of James H. Block's Mastery Learning: Theory and Practice, pp. 79-87)

Evaluation of teachers in the social studies department is contingent upon the following three factors: (1) student mastery of performance objectives as evidenced by summative test results, (2) student opinion regarding a course and/or instructional units as evidenced by questionnaires, and (3) evidence of instructional design skills on the part of the teacher. Department members, administrators, and students will all be involved in the total evaluation of the social studies program at John F. Kennedy Senior High School. Parents, too, are invited to provide the school and department with valuable feedback.

CHECKLIST FOR DESIGNING A COURSE SYLLABUS
(Hymel, 1977)

	Check When Completed
1. Specify pertinent identifying information regarding the course (e.g., course title, instructor, time of class meeting, and room location).	_____
2. Describe in narrative form the subject-matter content of the course.	_____
3. State the rationale for the existence of the course.	_____
4. List the goals or general objectives of the course.	_____
5. Determine the prerequisites for the course.	_____
6. Outline the various units which comprise the course.	_____
7. Identify the instructional methods employed in the course.	_____
8. Identify and explain major requirements of the course as well as their corresponding deadlines, if any.	_____
9. Specify the resource materials utilized in the course.	_____
10. Specify the course schedule with an emphasis on correlating items such as dates of class meetings, topics addressed, and assignments.	_____
11. Describe the evaluation plan for the course relative to the following: evaluation approach (e.g., criterion-referenced), numerical range for grades, value of written assignments, and method of determining final grade.	_____
12. Construct a course evaluation form which would be used to facilitate student feedback relative to the effectiveness of the course.	_____

EXEMPLARY COURSE SYLLABUS

UNITED STATES HISTORY: FIRST SEMESTER

Mr. G. S. Mathews
Instructor of History
John F. Kennedy Sr. High School

Semester: _____
Room No.: _____
Time: _____

COURSE DESCRIPTION

This course is designed to present the senior high school student with a semester-long survey of United States history. While this first semester course is intended to cover the subject as comprehensively as time permits, the following topics will receive major emphasis: European exploration of the New World, English colonization of America, the American Revolution, Independence and the Constitution, Jeffersonian democracy, the War of 1812, Jacksonian democracy, territorial expansion, and the Civil War and Reconstruction. Furthermore, emphasis in this course is generally political and social.

COURSE RATIONALE

In order for American citizens and the country's future leaders to best govern coming generations, it is necessary for them to have an understanding of the nation's beginnings, its triumphs and failures, its past, and prospects for the future. The contents and activities which make up this course provide an essential basis for the understanding of early American history which in turn enables one to better comprehend and interpret more recent American history.

COURSE GOALS

Upon completion of this course, the student should be able to perform the following tasks:

1. Identify the various Europeans which competed for dominance in the New World and discuss why they settled in different geographical areas of America.

2. Identify the thirteen original English colonies of America and discuss the circumstances surrounding their founding; also discuss the conditions in England leading up to colonization in America.

3. Write a short essay, detailing the reasons for the discord that grew between the colonies and their mother country of England.

4. Compare and contrast the strengths and weaknesses that each side had during the American Revolution.

5. Discuss the background information on the development of the new government of the United States of America.

6. Compare and contrast the strengths and weaknesses of the Articles of Confederation and the Constitution.

7. Define and discuss what is meant by the term Jeffersonian democracy.

8. Define and discuss what is meant by the term Jacksonian democracy.

9. Identify the territorial development of the United States as it relates to acquisition, treaty and war.

10. Point out the factors that led to sectionalism in the United States.

11. Document Lincoln's efforts to save the Union.

12. Compare the strategies of the Union and Confederate armies.

13. Explain President Andrew Johnson's plan of Reconstruction.

PREREQUISITES: 10th Grade Status

OUTLINE OF COURSE CONTENTS

A. European Exploration of the New World

1. Changes in Europe Lead to Discovery and Colonization

2. A New World is Discovered by Europeans

3. The Spanish Develop an American Empire

4. The French Establish Colonies in America

B. English Colonization of America

1. Conditions in England Encourage Colonization in America
2. Virginia: the First Successful English Colony is Founded
3. The New England Colonies are Founded
4. Proprietors Establish Several Colonies

C. The American Revolution

1. The French and Indian War Results in Conflict between the Colonists and the British
2. British Colonial Policies Anger Colonists
3. Open Resistance Develops throughout the Thirteen Colonies
4. War is a Reality

D. Independence and the Constitution

1. Americans Defeat the British
2. Independence is Accomplished
3. The Constitution is Drafted and Ratified
4. Amending the Constitution

E. Jeffersonian Democracy

1. Jefferson Alters Federalist Policies
2. Louisiana Purchase Expands America
3. Jefferson Protects American Rights
4. Jefferson's Legacy

F. The War of 1812

1. Americans Defend Neutral Rights
2. Westerners and Southerners Want War
3. No One Wins War
4. Americans Strive for Economic and Cultural Independence

G. Jacksonian Democracy

1. Jackson Spreads Democracy
2. Jackson Seeks to Solidify Followers
3. The Death of the Bank of the United States is due to President Jackson
4. Jackson's Legacy

H. Territorial Expansion

1. Americans Establish Texas
2. The United States Acquires Texas and Oregon
3. America and Mexico Fight a War
4. The Compromise of 1850 Delays Civil War

I. Civil War and Reconstruction

1. Slavery is a Way of Life in the South
2. Economics and Slavery: The Catalyst is Established for Conflict
3. War Begins
4. Postwar America Enters Reconstruction

INSTRUCTIONAL METHODS

1. Lecture
2. Discussion
3. Readings
4. Audio-Visual Reinforcement

RESOURCES

A. Books:

1. Roberts, P. M. United States history review text. New York: AMSCO School Publications, Inc., 1973.

2. Ver Steeg, C., & Hofstadter, R. A people and a nation. New York: Harper & Row, 1971.

3. Wade, R. C., Wilder, R. B., & Wade, L. C. A history of the United States. New York: Houghton Mifflin Company, 1968.

B. 16 MM Films

1. Available through the New Orleans Public Schools Media Center (Specific titles listed in catalog)

2. Various Media Hardware are Available through the Kennedy Senior High Media Center, KSHS Library

C. Recordings (Tape, Records)

1. Available through the Kennedy Media Center, KSHS Library

D. Other

1. A variety of other resources will be utilized throughout this course as needed.

COURSE SCHEDULE

Date	Topic	Readings
_____	Orientation	
_____	European Exploration of the New World	VS & H: ch. 1 W et al: ch. 1
_____	Summative Test #1	
_____	English Colonization of America	R: ch. 2 VS & H: ch. 2 W et al; ch. 2,3
_____	Summative Test #2	
_____	The American Revolution	R: ch. 3 VS & H: ch. 3,4 W et al: ch. 4,5
_____	Summative Test #3	
_____	Independence and the Constitution	VS & H: ch. 5,6 W et al: ch. 6
_____	Summative Test #4	

Date	Topic	Readings
_____	Jeffersonian Democracy	VS & H: ch. 8 W et al: ch. 8
_____	Summative Test #5	
_____	The War of 1812	VS & H: pp. 173-76 W et al: ch. 9
_____	Summative Test #6	
_____	Jacksonian Democracy	VS & H: ch. 10
_____	Summative Test #7	
_____	Territorial Expansion	VS & H: pp. 216-27 W et al: ch. 13
_____	Summative Test #8	
_____	Civil War and Reconstruction	VS & H: ch. 15,16,17 W et al: ch. 14-19
_____	Summative Test #9	
_____	Review Session	
_____	Semester Examination	

ASSIGNMENTS

A. Class Attendance: Roll will be taken each class period. Failure to attend class will result in administrative referral as well as home phone calls. Attendance is crucial in order to keep up with classwork. Otherwise, he/she will find the work increasingly more confusing and the tests more difficult.

B. Readings: The required readings are specified in the COURSE SCHEDULE above. (VS & H = Ver Steeg & Hofstadter; W et al = Wade & others; R = Roberts)

C. Notebook: Notebooks are to be turned in after <u>each</u> of the nine week periods comprising Kennedy's semester system. The student's notebook must contain all notes and assignments dating from the first day of class. Students are encouraged to acquire a folder-type notebook to which paper can be added and fastened. It is imperative that the student bring his/her notebook with him or her <u>each and every day of class</u>.

D. Book Report: Each student is to select and read a book dealing with some aspect of early American history (1492-1865). The book may be a biography of some prominent American figure or may cover some important event of U.S. history. You will receive a book report form from the teacher at the earliest possible date.
Date Due: _____

E. Homework: Homework will be assigned regularly and will sometimes take written form and sometimes not. It must be turned in on time and should reflect neatness and correctness.

F. Other Assignments: From time to time, as student needs warrant, there may be special assignments.

EVALUATION

A student's grade will be based upon how well he/she masters the subject matter and meets the objectives of the course. Students will not be evaluated on rank in class or by any other similar curve situation. The following standards will be applied:

A:	93-100%	mastery of objectives
B:	85-92%	mastery of objectives
C:	75-84%	mastery of objectives
D:	70-74%	mastery of objectives
F:	Below 70%	mastery of objectives

MORE ON EVALUATION

In computing a student's grade, the following division will take place:

1. Semester Exam = 20%
2. Summative Tests = 35%
   (Formative tests will be given throughout a unit for the purpose of diagnosis; no grade will be given.)
3. Book Report = 10%
4. Homework = 25%
5. Notebook = 10%

At the conclusion of each topic of the course, a summative test will be administered. The average score resulting from the computation of all nine summative tests scores will then count for 35% of the final course grade. Summative tests will be criterion-referenced in nature based upon the performance objectives of the particular unit of instruction. (The tests themselves will encompass a whole class period as noted in the COURSE SCHEDULE; they will be both objective and essay in format.) The semester examination will also be criterion-referenced based upon the overall goals of the course and the various performance objectives of the different units; it, too, will be both objective and essay in format.

The book report will be graded on a satisfactory/unsatisfactory basis and in accordance with the criteria stipulated by the book report form. Homework and notebooks will also be graded on a satisfactory/unsatisfactory basis. The submission of book reports, homework assignments, and/or notebooks after the designated due date will result in a loss of one-half of its original point value.

COURSE EVALUATION FORM FOR U.S. HISTORY: FIRST SEMESTER

Please respond to the following questions by circling one of the following:

Excellent	Very Good	Average	Fair	Poor
5	4	3	2	1

A. TEACHER PARTICIPATION IN CLASS

1.	The teacher was enthusiastic when presenting course material.	5 4 3 2 1
2.	The subject matter was presented in a clear fashion.	5 4 3 2 1
3.	The teacher attempted to answer questions that pertained to the subject matter presented in class.	5 4 3 2 1
4.	The teacher encouraged students to ask questions.	5 4 3 2 1
5.	The teacher encouraged students to express opinions.	5 4 3 2 1
6.	The teacher showed concern for the student.	5 4 3 2 1

B. STUDENT PARTICIPATION IN CLASS

1.	I usually paid attention in class.	5 4 3 2 1
2.	I felt the subject matter presented in class was challenging.	5 4 3 2 1
3.	I was provided with ample opportunity to ask questions.	5 4 3 2 1
4.	I was able to express my opinions when desired.	5 4 3 2 1
5.	Ample time was allowed for each unit covered in the course.	5 4 3 2 1
6.	I was able to take good notes as the result of the teacher's methods.	5 4 3 2 1

C. EVALUATION

1.	The grading system was well explained.	5 4 3 2 1
2.	Tests were fair and well constructed.	5 4 3 2 1
3.	Items on the summative tests were reflective of items found on the formative tests. (Tests were consistent with objectives of the course.)	5 4 3 2 1
4.	The course material will be of value to me in the future.	5 4 3 2 1

D. COMMENTS

Please use the space below for any comments or suggestions you may have for the improvement of this course in U.S. history.

CHECKLIST FOR DESIGNING AN INSTRUCTIONAL UNIT
(Hymel, 1977)

	Check When Completed
1. Identify the topic addressed in the unit.	_____
2. Describe in narrative form the subject-matter content of the unit.	_____
3. State the rationale for the inclusion and location of the unit in the course.	_____
4. List the performance objectives for the unit.	_____
5. Identify and/or construct a test for pre-requisite competencies.	_____
6. Outline in detail (via an advance organizer) the various topics and subtopics which comprise the unit.	_____
7. Identify the instructional methods used in the unit.	_____
8. Identify the various learning activities in which the students will engage as they proceed through the unit.	_____
9. Specify the resources utilized in the unit.	_____
10. Construct a formative test which addresses itself to the performance objectives of the unit and which serves a diagnostic purpose.	_____
11. (a) Identify various activities and assignments of a review and/or remedial nature to which a student would be recycled in order to correct certain learning deficiencies uncovered by the formative test.	_____
(b) Prepare a form which reports the results of the formative test and which establishes a correspondence between items missed on the formative test and learning correctives.	_____

12. Construct a summative test which addresses itself to the performance objectives of the unit. _____

13. Construct a unit evaluation form which would be used to facilitate student feedback relative to the effectiveness of the instructional unit. _____

EXEMPLARY INSTRUCTIONAL UNIT

UNIT TOPIC: English Colonization of America

DESCRIPTION: In this unit consideration is given to the initial beginnings or founding of the thirteen original English colonies in North America. More specifically, the historical circumstances (events, places, and persons) surrounding the founding of Virginia, Massachusetts, Rhode Island, Connecticut, New Hampshire, Maryland, North Carolina, South Carolina, New York, New Jersey, Delaware, Pennsylvania, and Georgia are thoroughly examined. Attention is also given to the conditions in England leading up to colonization in America.

RATIONALE: The student of early American history must have an understanding of the early foundations of the United States of America. Knowledge of the conditions leading up to and the actual founding of American colonies is essential in analyzing United States history as a whole.

PERFORMANCE OBJECTIVES: Upon completion of the learning activities associated with the topic "English Colonization of America," and without access to reference notes and materials, the student should be able to perform the following tasks with 90% proficiency:

1. Identify and discuss the conditions that encouraged the English colonization of America.

2. (a) Identify the first successful English colony in America and the circumstances surrounding its founding. (b) Assuming the character of King James of England, propose a policy with respect to the following New World issues: private ownership of property, representative government, and trial by jury.

3. (a) Apply the concept of democracy to the drawing up of the Mayflower Compact. (b) Argue that the differences between the founding of the Plymouth Rock and Massachusetts Bay colonies were not minimal.

4. Explain the reasons for the settlement of Rhode Island, Connecticut, and New Hampshire.

5. Identify the first proprietary colony in America and explain the circumstances enabling its founding.

6. Discuss the motives behind the founding of the Carolinas.

7. Evaluate the merits of those favoring Dutch rule in colonial New Netherland (New York).

8. Differentiate between the methods by which New Jersey and Delaware were founded.

9. Identify the colony serving as a haven for the Quakers.

10. Identify the last English colony to be founded in America and the reasons for its existence.

11. Briefly identify or define the following: Henry VII, Elizabeth I, Sir Humphrey Gilbert, Sir Walter Raleigh, James I, London Company, Plymouth Company, Virginia Charter, Separatists, Puritans, Roger Williams, Anne Hutchinson, town meetings, Thomas Hooker, Mayflower Compact, Fundamental Orders of Connecticut, Sir George Calvert, Peter Stuyvesant, Charles I, Charles II, Duke of York, William Penn, Quakers, George Hanover, and James Oglethorpe.

PREREQUISITES: Participation in the previous unit entitled "European Exploration of the New World" is recommended.

ADVANCE ORGANIZER (FOR LECTURE) (Wade et al., 1968):

I. Introduction

A. Conditions in England Encourage Colonization in America

B. Great Britain Grows Strong Under Tudors

1. Henry VII Subdues Powerful Nobles

2. Elizabeth I Promotes Expansion of Trade and Commerce

C. First English Attempts to Settle New World Are Failures

1. Individuals Finance Earliest Attempts

a. Sir Humphrey Gilbert: Dismal Failure in New World

b. Sir Walter Raleigh: Establishes "Lost Colony of Roanoke"

2. Trading Companies Replace Individuals As Financiers

II. Virginia: the First Successful English Colony

A. James I Charters Two Trading Companies

1. London Company is to Plant the "First Colony"

2. Plymouth Company is to Plant the "Second Colony"

B. Members of the London Company Arrive At Peninsula On James River in 1607

1. Location is Named Jamestown in Honor of King James Stuart

2. Jamestown is Low, Swampy Land Covered with Trees and Surrounded by Hostilities Perpetuated by Indians and Malaria-Carrying Mosquitoes

C. Important Provisions of Virginia Charter

1. Representative Government

2. Trial by Jury

3. Right to Own Property

4. Same Rights As Englishmen

D. Slavery is Introduced

E. Tobacco Becomes Vital Crop

III. Plymouth Company Establishes Second Colony

A. Members of Plymouth Company Deceive James I

B. Exiled English "Separatists" Trek from Holland to Plymouth Rock in Massachusetts

C. "Pilgrims" Draw up Mayflower Compact

1. Majority Rule is Established

2. "Consent of the Governed" Planted Firmly in Plymouth Colony

IV. English "Puritans" Decide To Leave England

A. King Charles I Persecutes Puritans

B. Puritans Found the Massachusetts Bay Colony in 1630

C. Massachusetts Bay is Autocratic yet "Town Meetings" Develop

D. Puritan Ministers Wield Tremendous Influence

V. Exiles from Massachusetts Settle Rhode Island

A. Roger Williams Challenges Authority of Church Officials

1. Government Officials Should Not Be Elected by Church Members Only

2. Church Has No Right to Interfere in Individual's Daily Life

3. Puritan Ministers Force Williams to Leave Colony

B. Williams and a Few Followers Establish Providence, Rhode Island

C. Anne Hutchinson Also Challenges Authority of Puritan Clergy

1. Puritan Ministers Are Too Worldly

2. Anne Banned from Colony as Being "Deluded by Devil"

D. Hutchinson, Her Thirteen Children, Husband, and Followers Settle Portsmouth, Rhode Island

VI. Pioneers Settle the Connecticut Valley

A. Thomas Hooker Seeks Freer Government

B. Hooker and Others Sell Homes and Depart for Connecticut

C. Hooker-Led Pioneers Establish Hartford, Connecticut

D. Fundamertal Orders of Connecticut: the First Written Constitution in America is Drawn Up

VII. Colonists Move into Region North of Massachusetts

A. New Hampshire Secures Charter from King Charles II

B. Maine Becomes (Remains) Part of Massachusetts

VIII. Maryland Becomes First Proprietary Colony

A. Sir George Calvert Secures a Grant of Land in America from Charles I

1. Maryland Becomes a Haven for Catholics

2. George Calvert Named Lord Baltimore and Proprietor of Maryland by Charles

B. Maryland Wins Political and Religious Freedom

IX. The Carolinas Are Settled

A. Eight Proprietors Gain Charter from Charles II

B. North and South Carolina To Serve As Buffer Area Protecting Northern Colonies from Indians and Spanish

X. New York Begins As a Dutch Trading Post

A. Peter Stuyvesant Named Governor of New Netherland

B. Charles II of England Declares New Netherland to Be a Part of a Grant to His Brother, the Duke of York

C. English Fleet Enters New Netherland and Dutch are Ousted

XI. New Jersey and Delaware are Founded

A. Jersey and Delaware are Included in Duke of York's Grant

B. Jersey Given to Two of Duke's Friends

C. William Penn Persuades Duke to Give Him the Southern Port of the Delaware River

D. Separate Colony of Delaware Organized in 1704

XII. Pennsylvania is Founded By William Penn

A. William Penn Inherits a Large Debt Against Charles II

B. Pennsylvania Becomes a Refuge for "Quakers"

XIII. Georgia is the Last English Colony

A. James Oglethorpe Secures Title to Land Named in Honor of George Hanover, King of England

B. Georgia is a Haven for English Debtors and Prisoners

C. Slavery is Outlawed

D. Colony Serves as Supplier of Materials for England and as Buffer between Indians/Spanish and the Northern Colonies

XIV. Reconsideration of the Thirteen Original Colonies

A. Virginia

B. Massachusetts

C. Rhode Island

D. Connecticut

E. New Hampshire

F. Maryland

G. North Carolina

H. South Carolina

I. New York

J. New Jersey

K. Delaware

L. Pennsylvania

M. Georgia

INSTRUCTIONAL METHODS

1. Lecture
2. Discussion
3. Readings
4. Audio-Visual Reinforcement

RESOURCES

1. Books:

   a. Roberts, P. M. United States history review text. New York: AMSCO School Publications, Inc., 1973.

   b. Ver Steeg, C., & Hofstadter, R. A people and a nation. New York: Harper & Row, 1971.

   c. Wade, R. C., Wilder, R. B., & Wade, L. C. A history of the United States. New York: Houghton Mifflin Company, 1968.

2. 16 MM Films:

   a. Children of the Colonial Frontier

   b. Plymouth Colony--First Year

   c. New England Town--Call of the Frontier

   d. The Pilgrims

LEARNING ACTIVITIES

1. Complete the readings designated in the course syllabus for this unit.

2. Attend the scheduled lecture on and discussion of the topic "English Colonization of America."

3. View the 16 mm films listed above.

4. Provide written responses to the 11 performance objectives and put them in your notebook.

FORMATIVE TEST

UNIT TOPIC: English Colonization of America

GENERAL DIRECTIONS FOR FORMATIVE TESTS: A formative test is an instrument for providing the student and teacher with intermittent feedback regarding the student's mastery of the subtopics making up a given unit of instruction. The different parts of the formative test should be completed at the end of the lecture on the various subtopics of the unit as depicted by the advance organizer. Immediately following each test item is a parenthetical citation which identifies that section of the advance organizer and lecture notes to which the student should refer if his/her response to the item was not correct. This procedure should help the student in correcting whatever learning deficiency resulted in the incorrect response being given.

Part I

DIRECTIONS: Each of the following statements is either consistent "C" or inconsistent "I" with the information provided in this unit. Please indicate the correct response by placing a "C" or an "I" in the space provided.

____ 1. Protests in England directed against the Church of England, interest in thwarting the threat posed by Philip II of Spain, and the high prices coupled with unemployment on the British mainland were all reasons for the interests of Englishmen in colonizing America during the 1600's and 1700's. (I, A)

____ 2. Henry VII and Elizabeth I were successful in directing the permanent colonization of America. (I, B, 1-2, C, 1, a-b, 2)

____ 3. The first successful English settlement in America was due largely to the rigorous efforts of the friends of Sir Walter Raleigh; James I granted a charter to Raleigh's friends who were divided into two trading companies. (II, A, 1-2)

____ 4. At no time did King James I of England grant members of the London Company permission to establish a colony based on the notion of representative government. (II, C, 1-4)

____ 5. In 1619 the first blacks to step foot on the English colonies in America did so at Jamestown, Virginia; they arrived as indentured servants and not as slaves. (II, D)

____ 6. Early in the colonial experience of the United States, cotton was the main money crop for the colonists. (II, E)

____ 7. "Separatists," better known to many as the pilgrims, founded the second successful English colony at Plymouth Rock, Massachusetts; these pilgrims chose to come to America escaping the persecution of the Church of England. (III, A, B, C)

____ 8. King Charles I of England forced many "puritans" (those who desired to make changes in the Church of England) to flee to America; many of these "dissenters" ended up in Massachusetts in the Boston area. (IV, A, B)

____ 9. Roger Williams and Anne Hutchinson both denounced the harshness of Puritan ministers in the Massachusetts Bay Colony; as a result of their opposition to these ministers both were forced to leave and both established settlements in Rhode Island. (V, A, 3, B, C, D)

Part II

DIRECTIONS: Each of the remaining statements is either consistent "C" or inconsistent "I" with the information provided on the last nine subtopics. Please indicate the correct response for each statement by placing a "C" or an "I" in the space provided.

____ 10. Thomas Hooker led a group of settlers into the Connecticut Valley as a result of his desire for a freer system of government; as the result of Hooker's effort, the first written constitution in America was formulated. (IV, A, D)

____ 11. A group of colonists from Massachusetts settled in the region north of that colony known as New Hampshire once they had gained the permission of King James I to do so. (VII, A)

____ 12. The term "proprietor" refers to one who has the exclusive or sole right or title to something. Certainly George Calvert may be considered the proprietor of Maryland as he had exclusive ownership of that colony. (VIII, A)

____ 13. Eight proprietors of the Carolina colonies were granted a charter of ownership from Charles II in order to establish a "buffer" area between the hostile Indian/Spanish threat and the northern English colonies. (IX, A, B)

____ 14. New Netherland, or New York as it was later named, was peacefully transferred from Dutch to English control. In fact, Dutch officials did not even complain to British authorities about the "takeover" of New Netherland sometimes known as New Amsterdam. (X, B, C)

____ 15. The colonies of New Jersey and Delaware were founded as the result of the grant given to the Duke of York by his brother, the King of England, Charles II. (XI, A)

____ 16. The Baltimore family of Maryland set up the colony of Pennsylvania as a haven for English Quakers. (XII, B)

____ 17. The last of the English colonies founded in America was done so under the Hanover dynasty of English monarchs. King George of England, a German, granted James Oglethorpe permission to establish Georgia as a result of a need to establish a refuge for English debtors and criminals. (XIII, A, B)

Part III

DIRECTIONS: Briefly identify or define the following:

18. Henry VII
19. Elizabeth
20. Sir Humphrey Gilbert
21. Sir Walter Raleigh
22. James I
23. London Company
24. Plymouth Company
25. Virginia
26. Separatists
27. Puritans
28. Roger Williams
29. Anne Hutchinson
30. town meetings
31. Thomas Hooker

32. Mayflower Compact
33. Fundamental Orders of Connecticut
34. Sir George Calvert
35. Peter Stuyvesant
36. Charles I
37. Charles II
38. Duke of York
39. William Penn
40. Quakers
41. George Hanover
42. James Oglethorpe

LEARNING CORRECTIVES BASED UPON

FORMATIVE TEST RESULTS--

PART I

_____ (Date) _____ (Name)

_____ (Period) _____ (Score)

____ The score which you achieved on Part I of the formative test was 100 ; therefore, there are no learning correctives which you must complete. Now examine performance objectives 4-11.

____ The score which you achieved on Part I of the formative test was _____. The test items which you missed are indicated on the following page. Please complete the designated learning correctives before examining performance objectives 4-11.

____ The score which you achieved on Part I of the formative test was _____. The test items which you missed are indicated on the following page. Please complete the designated learning correctives and then retake Part I of the formative test. Remember, you must make a score of 90 or higher before proceeding to the next group of objectives without teacher approval.

LEARNING CORRECTIVES FOR PART I OF FORMATIVE TEST

Test Item(s) Missed	Learning Correctives
____ #1	Review I, A of advance organizer (via notes); read pp. 23-26; write response to item 3 of CHECK-UP on p. 26.
____ #2	Review I, B, 1-2, C, 1, a-b, 2 of advance organizer; see p. 23; write response to item 1 of CHECK-UP on p. 26.
____ #3	Review II, A, 1-2 of advance organizer.
____ #4	Review II, C, 1-4 of advance organizer.
____ #5	Review II, D of advance organizer.
____ #6	Review II, [illegible] of advance organizer.
____ #7	Review III, A, B, C of advance organizer.
____ #8	Review IV, A, B, of advance organizer; write response to item 2 of CHECK-UP on p. 26.
____ #9	Review V, A, 3, B, C, D of advance organizer.

Note: Readings and CHECK-UPS are located in Wade et al.

LEARNING CORRECTIVES BASED UPON FORMATIVE TEST RESULTS-- PARTS II & III

_____ (Date)

_____ (Name)

_____ (Period)

_____ (Score)

___ The score which you achieved on Parts II & III of the formative test was 100; therefore, there are no learning correctives which you must complete. Prepare further for the summative test.

___ The score which you achieved on Parts II & III of the formative test was _____. The test items which you missed are indicated on the following page. Please complete the designated learning correctives before preparing for the summative test.

___ The score which you achieved on Parts II & III of the formative test was _____. The test items which you missed are indicated on the following page. Please complete the designated learning correctives and then schedule a meeting with the teacher to discuss the problems you are having.

LEARNING CORRECTIVES

FOR PARTS II & III OF FORMATIVE

TEST

Test Item(s) Missed	Learning Correctives
_____ #10	Review VI, A, D of advance organizer; read p. 33; write response to item 3 of CHECK-UP on p. 34.
_____ #11	Review VII, A of advance organizer.
_____ #12	Review VIII, A of advance organizer; read p. 34; write response to item 1 of CHECK-UP on p. 39.
_____ #13	Review IX, A, B of advance organizer.
_____ #14	Review X, B, C of advance organizer; read pp. 37-38; write response to item 2 of CHECK-UP on p. 39.
_____ #15	Review XI, A of advance organizer.
_____ #16	Review XII, B of advance organizer; read p. 38; write response to item 3 of CHECK-UP on p. 39.
_____ #17	Review XIII, A, B of advance organizer.
_____ #18 thru #42	See vocabulary list for chap. 2.

Note: Readings and CHECK-UPS are located in Wade et al.

SUMMATIVE TEST

UNIT TOPIC: English Colonization of America

DIRECTIONS: In each of the blanks below, write the letter of the response that answers the question, completes the sentence, or fills in the blanks positioned within the stem item.

____ 1. All but which one of the following are reasons for the English interests in colonizing America in the 1600's?

A. military threat posed by Philip II of Spain
B. high prices and unemployment in England
C. Henry's interest in exploration
D. protests against the King of England

____ 2. Which one of the following pairs was granted permission to colonize in America by Queen Elizabeth?

A. Francis Drake and Walter Raleigh
B. John Cabot and Humphrey Gilbert
C. John Smith and John Cabot
D. Humphrey Gilbert and Walter Raleigh

____ 3. All but which one of the following are provisions of the Virginia Charter as granted by James I?

A. right to own property
B. representative government
C. trial by jury
D. female suffrage

____ 4. The first blacks to arrive in the New World did so:

A. in 1620 at Plymouth, Massachusetts
B. in 1619 at Jamestown, Virginia
C. in 1630 at Boston
D. in the 1730's in Georgia

____ 5. Which of the following was responsible for the founding of the first successful English colony in America?

A. London Company
B. Plymouth Company
C. James II
D. George Hanover

____ 6. The _____ founded the second successful English settlement in America; these _____ came to America to escape the persecution of the Church of England.

A. Puritans, pilgrims
B. Separatists, pilgrims
C. Puritans, dissenters
D. Plymouth Company, businessmen

____ 7. As a result of the efforts of Roger Williams and Anne Hutchinson, which one of the following colonies was established?

A. New Hampshire
B. Maine
C. Connecticut
D. Rhode Island

____ 8. Which one of the following colonies was not of the proprietary type?

A. Maryland
B. North Carolina
C. Connecticut
D. Delaware

____ 9. Pennsylvania was established as a refuge for:

A. Separatists
B. Catholics
C. Puritans
D. Quakers

____ 10. New York was originally a Dutch trading post that became a part of the English colonies in America by virtue of a grant given to _____ by _____.

A. Duke of York, Charles II
B. James Oglethorpe, George Hanover
C. eight proprietors, Charles II
D. Lord Baltimore, Duke of York

____ 11. The last English colony to be settled in America was established under which of the following monarchial families?

A. Tudors
B. Stuarts
C. Hanovers
D. Landcasters

DIRECTIONS: Write a brief sentence or two identifying the items below. Write legibly and use the space provided.

1. London Company:

2. Plymouth Company:

3. town meetings:

4. Mayflower Compact:

5. Fundamental Orders of Connecticut:

6. Duke of York:

7. James Oglethorpe:

DIRECTIONS: On the notebook paper provided you by the teacher, respond in paragraph form to the discussion items below.

1. *Discuss the circumstances surrounding the evolution of the first proprietary colony in America.

2. Identify the last English colony to be founded in America and discuss the reasons for its founding.

3. Describe how each of the following influenced colonization of America: (a) social conditions in England, and (b) trade and commerce.

4. Apply the concept of democracy to the drawing up of the Mayflower Compact.

5. Argue the reverse of the following resolution: That the differences between the founding of Plymouth Rock and Massachusetts Bay colonies were minimal.

6. Pretending you are King James of England, propose a policy with respect to the private ownership of property in the New World.

7. Evaluate the merits of arguments of those favoring Dutch rule in colonial New Netherland (New York).

*Discuss may be considered comprehension in given situations

*Test Item Classification (Cognitive Domain; see Bloom, 1956)
Multiple Choice Items 1-11: Knowledge
Identification Items 1-7: Knowledge
Discussion Items *1-2: Knowledge; 3: Comprehension; 4: Application; 5: Analysis; 6: Synthesis; 7: Evaluation

EVALUATION OF UNIT ON THE ENGLISH COLONIZATION OF AMERICA

Please respond to the following questions by circling one of the following:

Excellent	Very Good	Average	Fair	Poor
5	4	3	2	1

A. TEACHER PARTICIPATION IN CLASS

1.	The teacher presented the material in a clear fashion.	5 4 3 2 1
2.	The teacher made the class sessions interesting.	5 4 3 2 1
3.	The instruction was systematic and orderly.	5 4 3 2 1
4.	The teacher allowed students to ask questions.	5 4 3 2 1

B. STUDENT PARTICIPATION IN CLASS

1.	I usually paid attention in class.	5 4 3 2 1
2.	I generally understood the unit objectives.	5 4 3 2 1
3.	I understood most of the directions given in class.	5 4 3 2 1
4.	The teacher's lecture and discussion methods were helpful in understanding the subject matter.	5 4 3 2 1
5.	The formative tests were helpful in identifying trouble areas.	5 4 3 2 1
6.	The teacher's outlines of material (advance organizer) were useful/ helpful in preparing for tests.	5 4 3 2 1
7.	The learning correctives were helpful in mastering the material missed on the formative tests.	5 4 3 2 1

C. EVALUATION

1. The grading system was explained adequately. 5 4 3 2 1

2. Items on the summative test were reflective of items found on the different parts of the formative test. 5 4 3 2 1

D. COMMENTS

Please use the space below for any comments or suggestions you may have regarding this unit.

APPENDIX B

John B. Carroll's Model of School Learning

JOHN B. CARROLL'S MODEL OF SCHOOL LEARNING
(Carroll, 1963; Hymel, 1977, pp. 123-124)

I. Basic Formulation of the Carroll Model

$$\text{Degree of Learning} = f\ \frac{\text{Time Spent}}{\text{Time Needed}}$$

II. Variables and Operations That Determine Time Needed

A. Variables Defined

1. Aptitude: The amount of time required by a student to attain mastery of a learning task under optimal conditions.

2. Ability To Understand Instruction: The ability of a student to perceive and to understand (a) the nature of the learning task with which he is confronted and (b) the procedures he must follow in order to master the task.

3. Quality of Instruction: The extent to which the various elements of a learning task are organized, presented, and explained in a manner commensurate with the special needs and characteristics of the learner.

B. Operations

1. Carroll's Hypothesized Interaction between Ability To Understand Instruction and Quality of Instruction: Students low in ability to understand instruction will suffer more with respect to degree of learning when subjected to low quality of instruction than will students high in ability to understand instruction.

2. Rule of Thumb for Determining Time Needed: The actual time needed by a student for the mastery of a learning task is equal to his aptitude (amount of time required for learning under optimal conditions) plus the interaction between ability to understand instruction and quality of instruction (additional time needed for learning as determined by the student's level of ability to understand instruction and the extent to which the quality of instruction deviates from that which is optimal for the learner).

III. Variables and Operation That Determine Time Spent

A. Variables Defined

1. Opportunity: The total amount of time allowed or made available for learning.

2. Perseverance: The amount of time a student is willing to spend actively engaged in a learning task.

B. Operation: Rule of Thumb for Determining Time Spent: The time actually spent in learning by a student is viewed as being equal to the smallest of the following factors: (a) opportunity, (b) perseverance, and (c) time needed.

IV. Learner-Oriented Variables

A. Aptitude

B. Ability To Understand Instruction

C. Perseverance

V. Instruction-Oriented Variables

*A. Quality of Instruction

B. Opportunity

*strengthened by systems-based instructional design

VITA

GARY STEVEN MATHEWS

PERSONAL:

Birthdate	May 8, 1953
Birthplace	Oak Grove, Louisiana
Family	
Wife	Mary Kay Lucas Mathews Student, University of Southern Mississippi, Early Childhood Education
Children	Kelly Michelle Mathews Age 3
	Jason Richard Mathews Age 1
Parents	Edwin Shelton and Ali Glen Mathews, Monroe, Louisiana
Brother	Donald Edwin Mathews Student, Louisiana Tech University, Business Administration, Ruston, Louisiana

EDUCATION:

Graduate, Neville High School, 1971; Monroe City School System; Monroe, LA

Louisiana State University Baton Rouge, LA	B.A. (Political Science)	1975
University of New Orleans New Orleans, LA	Secondary Education, Social Studies Certification	1976
Loyola University New Orleans, LA	M.Ed. (Educational Administration & Supervision)	1979

PROFESSIONAL AND HONORARY ORGANIZATIONS:

American Educational Research Association
Association for Supervision and Curriculum Development
Kappa Delta Pi
Mid-South Educational Research Association
National Association of Secondary School Principals

PAPERS PRESENTED AT PROFESSIONAL CONFERENCES:

Hymel, G. M., & Mathews, G. S. "Effects of Varying Degrees of Specificity of Diagnostic-Prescriptive Procedures on the Cognitive Achievement of U.S. History Students." Mid-South Educational Research Association; Little Rock, Arkansas; November, 1979.

Hymel, G. M., & Mathews, G. S. "A Mastery Approach to Teaching U.S. History: The Impact on Cognitive Achievement and Unit Evaluation." American Educational Research Association; Boston, Massachusetts; April, 1980.

PUBLISHED JOURNAL ARTICLES:

Hymel, G. M., & Mathews, G. S. Effects of a mastery approach on social studies achievement and unit evaluation. The Southern Journal of Educational Research, 1980, 14, 191-204.

EXPERIENCE:

August 1980-Present	Graduate Assistant, Department of Educational Administration & Supervision, University of Southern Mississippi, Hattiesburg, MS
August 1979-June 1980	Coordinator, Secondary Curriculum Improvement Program (SCIP), John F. Kennedy Senior High School, New Orleans Public Schools, New Orleans, LA
December 1976-May 1979	Social Studies Teacher, John F. Kennedy Senior High School, New Orleans Public Schools, New Orleans, LA
January-May 1976	Part-Time Substitute Teacher, John Q. Adams Junior High School and Haynes Middle School, Jefferson Parish Public School System, Gretna, LA